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MADRAS.

1921-22.

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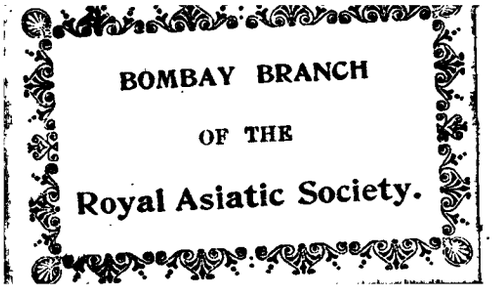

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FOR THE YEAR

1921-22

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PREFATORY NOTE

PRIOR to the year 1901–1902, the Report on the Administration of the Madras Presidency was of a purely annual nature, and standing information was published in a separate volume. From the year 1901–1902 onwards, the two publications were combined and, by the orders of the Government of India, observed in the present Report, the gist of the information contained in the old "Manual of Standing Information" was revised decennially and included in "red letter chapters" in the annual Report, these chapters being distinguished by the red print of their headings. To facilitate references from the standing information of the red letter chapters to the details of the yearly reports, a note has been made wherever necessary in the margin of the former to indicate the position of the corresponding annual information.

Part I of this Report—the "General Summary"—deals with the calendar year 1922; Part II—the main report—deals with the official year 1921–22 except where a different period is specifically noted.

PART I

GENERAL SUMMARY

1. *General.*—The first important event of the year was the visit of His Royal Highness the Prince of Wales, who landed at Madras on the 13th January and left on the 18th, after an arduous round of official and private functions, including visits to the Legislative Council and the University. His Royal Highness was received with enthusiasm wherever he went, and though the non-co-operating faction, in their endeavours to secure a hartal, succeeded in arousing a spirit of hooliganism among some of the lower classes in the city on the day of his arrival and in causing a considerable amount of annoyance to law-abiding citizens and damage to tram-cars and private property, the disturbance was suppressed in a few hours ; and there was no further interference with the celebrations.

2. *Legislative Council.*—The Legislative Council experienced a year of particular difficulty owing to the financial shortage, one main cause of which was the very large reduction in the excise revenue as a result of the activities of the non-co-operators. To meet this, drastic economies were made, covering a total sum of Rs. 71 lakhs and Bills were introduced for increasing the revenue under the heads of Stamps, Court Fees and Village Officers Cesses, the estimates under the first two heads amounting to Rs. 70 lakhs and under the last to Rs. 40½ lakhs. The Council accepted the first two proposals, but rejected the third. The budget, which on first introduction provided for a deficit of Rs. 22·48 lakhs, showed at the close of the discussions a deficit of Rs. 42·05 lakhs, the main reason for which was the Council's decision to add to the salaries of the village officers, while rejecting the proposals to levy cesses to meet the bill.

A vigorous movement to seek financial relief by a reduction of the heavy provincial contribution to the Central Government failed in its object. The main endeavour was to secure a reduction in the whole of the contributions which the Government of India recover from the provinces, to a large proportion of any reduction in which Madras, by reason of her large share, has the first claim. A different scheme was, however, favoured by the representatives of certain other provinces, with the result that neither secured a majority vote.

In addition to the two Acts mentioned above, three other Bills became law during the year. These were the Madras Revenue Recovery (Temporary Amendment) Act, 1922 (IV of 1922), the Madras City Municipal (Amendment) Act, 1922 (VII of 1922) and the Madras Proprietary Estates Village Service and Hereditary Village Offices (Temporary Amendment) Act, 1922 (VIII of 1922). At the end of the year four further Bills (including a Bill to regulate State Aid to Industries and another to amend the Port Trust Act) had passed the Council and were awaiting the assent of the Governor-General, and two important measures —the University Bill and the Religious Endowments Bill—were under

consideration. Apart from the Legislative work of the Council notice was given of 361 resolutions on matters of public interest and 885 questions were asked and answered. Many resolutions remained undiscussed at the close of the session of 1921-22 and therefore lapsed and a similar fate will probably befall an even larger number in 1923. Many resolutions and questions were either identical or overlapped each other and the numbers might be considerably reduced by a co-ordination of the activities of individual members. On important matters the Ministers were generally able to rely on the support of a fairly well-defined majority and were therefore successful in carrying through some of the most urgently needed legislation and in defeating some attacks made on the Government by opposing groups or individuals. There is as yet no other similarly organized party, though there are members who habitually vote against the Government and others who are sometimes found supporting the majority and at other times in opposition.

The Finance Committee and the Committee of Public Accounts remained the only standing committees of the Council. The latter is a statutory body, the constitution and functions of which are prescribed by rules : the former, which is an advisory body, was used most extensively in the examination of all proposals of financial importance before they came before the Council. In addition there were Advisory Committees for Education and Registration, Excise, the Agency, Public Works, Forests, Industries and Fisheries, Agriculture and Co-operation and Local and Municipal and Public Health Administration which, though not standing committees of the house, were wholly composed of its members and helped to keep members in touch with the departments. The President and the Secretary of the Council went to Europe during the year to study British methods of Parliamentary procedure.

3. *Political.*—At the beginning of the year the Māppilla rebellion, though most of its force had been spent, had not been finally suppressed. Operations against the Māppillas were pursued vigorously and by the 24th February it was found possible to withdraw Martial Law ; some of the troops had left the district before that date and others were removed as time went on, but military assistance was needed until the end of May ; and the battalion at Cannanore had to be indented on again in September to garrison the posts of the special police who were sent to the Agency. It was not till August that the Konnara Tangal, the last of the important leaders, was arrested. The place of the Martial Law Ordinance was taken by the Malabar (Restoration of Order) Ordinance, under which the special criminal courts instituted to deal with cases arising out of the rebellion were retained and power was given to the civil authorities to make regulations for the maintenance of order. This was succeeded in August by the Malabar (Completion of Trials) Ordinance which retained the courts for the trial of offenders who had been arrested and were awaiting trial at the time of the expiry of the Restoration of Order Ordinance. The number of offenders to be dealt with was very large, and in view of the possibility that all the cases arising out of the rebellion would not be disposed of by the 24th February 1923, when the last Ordinance expires, and also to provide for the performance of residuary functions, the Legislative Council in

December passed a Bill which, on receipt of the assent of the Governor and the Governor-General, will come into force as the Malabar (Completion of Trials) Act. Meanwhile the process of reconstruction has been going on. Private bodies, and especially the Servants of India Society, have taken an active part in relieving the necessities of sufferers and the Government have disbursed nearly 10 lakhs of rupees in loans. It was for a long time difficult to persuade the Hindu inhabitants, and especially the large landholders, of the affected area to trust themselves in the villages from which they had fled; but confidence was gradually restored; over the greater part of the area the crops were sown in good time; and a favourable monsoon has brought a bumper harvest. There were at no time pronounced signs of distress and by the end of the year conditions were becoming normal.

In some other parts of the Presidency the non-co-operation movement appeared, early in the year, to have obtained a hold over a section of the population. There was a definite and widespread refusal to pay the land-tax in the Guntūr district in January and February, with threatenings of civil disobedience of a similar kind in a few other districts. Vigorous action on the part of the local officers, the quartering of additional police on the worst affected areas and, in Guntūr, the presence of a company of infantry, a few armoured cars and a small detachment of His Excellency the Governor's Bodyguard had a good effect. The revenue in Guntūr was collected before the end of March and elsewhere at the normal times; and after the arrest of Gandhi the political atmosphere cleared very considerably, though the Government and their officers continued to be subjected to malicious and often scurrilous vilification, and proceedings had to be instituted against individual agitators. In spite of some appearance of excitement in a few places during the visit of what was called the "Civil Disobedience Enquiry Committee," the improvement was maintained throughout the rest of the year; and the majority of the persons arrested in connexion with the non-co-operation movement have now been released.

In the latter part of August an outbreak occurred in the Gudem hills, which were formerly a part of the Vizagapatam district and are now attached to the Rampa subdivision of the Agency division. A man named Alluri Srirama Razu, a native of the Kistna district, who has been living in these hills for the past year or two and had established a reputation for sanctity, gathered a band of local malcontents and raided three police stations, securing 26 carbines and a large quantity of ammunition. His followers, whose numbers are believed at one time to have reached 200, had, in addition, other arms varying from sporting guns to bows and arrows, and taking advantage of their superior mobility and knowledge of the country, which consists of steep jungle-covered hills, entirely baffled the local police. Their leader proclaimed himself king and declared war on the Government, but except for attacks on the police, confined his depredations to the commandeering of food for his band and—no doubt partly because he was regarded as a saint—received more assistance from the villagers than did the police. The latter were ambushed more than once and on one occasion sustained a severe reverse, two promising young police officers—Messrs. Scott Coward and

Hayter—and two constables being killed, two other men wounded, and six ·303 rifles taken by the rebels. It was not till a considerable body of the special police from Malabar had been brought to the Agency that any impression was made on the rebellion. In the first week in December, however, two detachments of the Malabar police succeeded in getting up with the gang and forcing two engagements in which 13 rebels were killed and 5 captured. Srirama Razu and his two lieutenants escaped and the gang scattered or went into hiding and all trace of them was lost till the end of the year.

4. *Financial.*—The critical financial position made imperative the closest scrutiny of all forms of public expenditure. The urgent necessity for the revision of salaries, especially in the subordinate services, had been met; and the resulting increase in the cost of general administration inevitably blocked schemes of development. The gross revenue of the province showed an increase over the 1921 figure. The main heads of receipts are Land Revenue, Excise and Stamps. Of these, Land Revenue increased, mainly owing to the collection of arrears, and the raising of stamp duties caused a rise in the income from that source. The non-co-operation campaign of the previous year still showed its evil effects in 1922 on the income from Excise; for the auction sales of toddy shops for the 1921–22 lease were held in the middle of 1921, when the movement was at its height, and the low bids then received affected the revenue till the end of September 1922. The auctions of arrack shops at the beginning of 1922 were less unfavourable and by the time that the toddy sales were held for the 1922–23 lease confidence had returned to the bidders, and the receipts for the latter months of the year rose almost to the normal level. On the expenditure side of the provincial accounts, the total figure showed an increase. Book adjustments and changes in the arrangements for the payment of interest led to an increase in the debt heads; and the final crushing of the Māppilla rebellion and the accommodation of the prisoners caused an increase in the expenditure on the police and on jails.

5. *Economic.*—The season on the whole was favourable, the south-west monsoon on the West Coast in particular being unusually heavy. In the Ceded Districts, where conditions are more frequently a source of anxiety than in any other part of the Presidency, the relief works opened in parts of Bellary and Anantapur during the early months of 1921 were closed in March 1922. Towards the end of September the shortage of rain caused anxiety; but in October rain was received in sufficient quantities to avert all fear of an immediate recrudescence of famine conditions. Throughout the Presidency, the prices of the staple food-grains generally remained at a high level. Wages, both in urban and in rural tracts, were also high, and, except in the parts of the Ceded Districts mentioned above, the demand for labour was always sufficient to absorb the supply.

6. *Labour.*—The few strikes that occurred during the year were of minor importance and were fortunately not accompanied by any serious intimidation or lawlessness. With the depression in trade the demand for labour declined and with it the tendency to agitate for higher wages. The unions officered by politicians have therefore been dormant, and though attempts have been made to stir up trouble in the Buckingham and Carnatic

Mills and to discredit a workers' welfare committee which has been instituted by the management, they have met with little success and the committee is recognized as an institution worth imitating. The Labour Department, in spite of some reduction of staff on financial grounds, was able to continue its work for the welfare of the depressed classes ; in Madras City Ādi-Drāvida tenants were protected from the constant threat of eviction from their houses by the City Tenants' Protection Act: in four mufassal districts good progress was made in starting schools and co-operative societies and in securing house-sites and land, and in other districts, where the department has no special staff, individual members of the depressed classes have been helped with the aid of the Collectors.

7. *Co-operation.*—During the year the remarkable growth of co-operation in the Presidency was well maintained. The extent of the expansion may be gauged from the fact that between 1st July 1921 and 30th June 1922 the number of societies rose from 6,289 to 7,389, with a total membership, exclusive of the membership of supervising unions, of over 460,000. As a result of the abnormal increase of the previous two years, it was found necessary to devote a large portion of the energies of the staff to consolidation, the stimulation of dormant societies and the weeding out of societies which it has been found impossible to revive or to run on true co-operative lines. Steady and systematic attempts were made to educate supervising unions in their duties and responsibilities so as to fit them to take an increasing share in the organization and supervision of primary societies. The demand for the organization of societies for the benefit of the depressed classes continued and was met wherever it was possible to overcome the special difficulties presented by the supervision of such societies. Three most encouraging symptoms have been noticeable during the past year—the improvement in the collection of outstandings ; the large amount of capital (almost Rs. 300 lakhs) employed in the movement apart from investments by one co-operative bank in another ; and the confidence displayed by the outside public in the stability of the movement, as evidenced in the fact that the major portion of the capital is derived from deposits by individuals, most of whom are non-members.

8. *Police.*—In spite of improvements in pay and conditions discontent was still manifested in the city police in the earlier months of the year. Any appreciable increase of expenditure was out of the question, but the force was allowed to lay its case before the Finance Committee of the Legislative Council and on the recommendation of that body the rules for promotion and increments were made rather more favourable. Additional police had to be quartered on the Guntūr district and on smaller areas in Gōdāvari and Cuddapah for some months ; the punitive force in Anantapur was retained, but it was decided in the course of the year to absorb that at Kamudi in the Rāmnād district in the general police establishment and to relieve the local inhabitants of the payment of the cost. A faction at Salem took advantage of the absence of a greater part of the district reserve at Madras on the occasion of the Prince of Wales' visit to create a riot by the forcible picketing of the local toddy shops ; and the outbreak in the Agency necessitated a concentration of the reserves of the neighbouring districts until the situation was taken over by the special police

from Malabar. There was, however, much less disorganization than in the previous year, and the police were able to devote more of their energies to the prevention of crime of a normal type. The discipline of the force was satisfactory, desertions and resignations declining considerably. Compared with the corresponding period of last year, grave crime decreased by 10 per cent ; the fall was most marked under dacoity, house-breaking and theft. To this result a systematic raiding of criminal gangs probably contributed largely. The percentage of detection remained stationary. The operations of the special officer who had been appointed, with highly successful results, to supervise the work of settling the Kallars of the Madura district were extended to the Rāmnād district.

9. *Law and Justice.*—The reduction of the Civil Justice grant by the Legislative Council led to the closing of eleven Civil Courts. There was a general decline in institutions, most marked in the courts of District Munsifs, and attributable partly to the enhancement of court-fees by the Act passed by the local Legislature, and also, in the case of small cause suits, to the opening of Panchayat Courts with jurisdiction up to Rs. 50. In spite of the enhancement of fees, the number of suits instituted in the High Court continued large and owing to temporary vacancies on the Bench the pendency increased. The volume of work on the criminal side was swollen by the number of referred trials resulting from the rebellion in Malabar. In the Presidency generally there was a decrease in the number of cases for trial following on an abatement of seditious activity and a continued and careful administration of the Criminal Tribes Act, coupled with a favourable season. Crimes of violence were particularly prevalent in the Coimbatore district.

10. *Jails.*—The strain on the prison accommodation caused by the influx of Māppilla prisoners increased in acuteness in the first half of the year and led, among other things, to the resumption of transportation to the Andamans. Four temporary sub-jails were opened, additional temporary accommodation was provided at five central jails and the camp jail at Bellary was moved into the disused British Infantry barracks in the interests both of the health of the prisoners and of the staff which had to guard them. Many of the Māppilla prisoners had been exposed to hardships and privations before they were arrested and reached the jails in a deplorable condition ; and it was mainly owing to the ravages of dysentery and influenza among them that the vital statistics compare so unfavourably with those of the previous year, though there was also an outbreak of cholera at Coimbatore. In the later months the situation was eased by the conditional release of a large number of Māppillas and by the diminution in the number of convictions in Malabar. The slight increase in jail offences and punishments is more than accounted for by the increased population, and, in spite of the large number of Māppilla and non-co-operation prisoners, the conduct of the convicts was on the whole satisfactory. Definite progress is being made in the development of the usefulness of the Central Discharged Prisoners' Aid Society at Madras and of its branches in the districts.

11. *Trade and Ports.*—Both in foreign trade on private account and in the coasting trade there was a very marked improvement during

the year, the actual percentage increases being 13 and 11, respectively. An abundant supply of commercial crops combined with the fall in freights and the rates of exchange led to an increase in foreign exports, while, in view of the increase in customs duties, the accumulation of stocks and the general expectation of a fall in prices which induced merchants to hold off as long as possible, the fall in imports was not unexpected ; by the end of September the excess of exports over imports had risen to Rs. 567 lakhs. There was an increase of 6 per cent in the proportion of British trade to the total sea-borne trade of the Presidency. The enhanced rates of customs duty resulted in a 50 per cent increase in customs revenue. At the port of Madras, the outstanding features of the year were the falling off in imports of rice and the attainment of a record figure for exports of groundnuts. There was an appreciable advance in the tonnage of shipping at the minor ports, but, owing to steamer competition, the coasting trade by sailing vessels appears to be in process of extinction. At Madras the repairs to the north-east sheltering arm of the harbour which was damaged by the cyclone in 1916 were nearly completed and improvements in the methods of handling goods were in progress. As regards the other harbours, there is no great amount of progress to record. In the case of Vizagapatam negotiations on the part of the authorities of the Bengal-Nagpur Railway regarding the financing of the scheme were in progress throughout the year. The scheme for a canal through the Rāmēswaram Island proved to be far more expensive than had been anticipated and was dropped, for the time being at any rate. The abandonment of this scheme laid the way open for progressing with a scheme for Tuticorin ; and a scheme for a harbour of four or six berths at a cost of Rs. 30 to 40 lakhs was drawn up and accepted by the local community. At Cochin, work was concentrated on clearing the channels that lead to the bar. Towards the close of the year the German dredger "Seetief" was received ; it is hoped that with its aid early progress will be made in the dredging of the bar itself.

12. *Agriculture.*—During the year the Agricultural College at Coimbatore was affiliated to the Madras University and a degree in agriculture was instituted. There is, however, little indication that agricultural education is appreciated for its own sake, the students for the new degree course being drawn mainly from the non-agricultural classes and having generally as the object in view the attainment of employment in Government service. Agricultural middle schools were opened at Taliparamba (Malabar) and Anakāpalle (Vizagapatam) and an experimental farm at Lam (Guntūr). Demonstrational work was the subject of particular attention, improved methods being brought to the notice of the ryots by demonstration farms and plots and by the efforts of a large staff of demonstrators. Progress was made in the distribution of improved strains of cotton and paddy ; a new paddy-breeding station was opened at Aduturai in the Tanjore district and another is contemplated in the Gōdāvari district. Preventive measures were introduced for the control of insect pests in cereals, areca nuts and rubber and the Madras Pest Act was enforced in respect of the bollworm and stem weevil of cotton in the south, and of palm disease in the palmyra tracts of the Northern Circars. Researches were carried on with regard to the pink bollworm and the

paddy stem borer, and improved methods of planting coconuts and of preparing jaggery were demonstrated. A close connexion was maintained with co-operative societies.

13. *Forests.*—The exploitation by emissaries of the non-co-operation party of the prejudices of the villager continued to enhance the difficulties of the department during the first few months of the year. Later, as non-co-operation fell into discredit, the relations between the Forest officers and the people improved and there are some indications that the educated classes are beginning to understand the importance of forest conservancy. The panchayats to which the care of many of the smaller reserves had been entrusted had in most cases taken very little interest in their preservation, and the Revenue officers under whose guidance they were supposed to work were unable to devote enough time or attention to them. A staff of Forest Panchayat Inspectors, to work under an officer attached to the Chief Conservator of Forests, has therefore been sanctioned in the hope that better results will be obtained. Steps were taken to repair the damage done by the rebels in Malabar to the forest buildings and works, especially in the Nīlambūr valley, where the records had been destroyed and all work dislocated. Investigation into the regeneration of the more valuable timbers in the evergreen forests of the West Coast; the initiation of work at the Russellkonda saw-mill and the introduction of its products to the larger markets ; the development of the Chenat Nayar scheme ; the introduction of a commercial form of accounts ; and the preparation of a scheme for the formation of an expert engineering and utilization branch were the outstanding features of departmental activity during the year.

14. *Fisheries.*—Sardines were abnormally scarce on the West Coast in the season of 1921–22. The season of 1922–23 gives better promise, large shoals having made their appearance already. The demand for the products of the Government Cannery is increasing, but is checked by the high postal and railway rates; and the fish meals prepared at Tanur have already found favour with the local cattle breeders and poultry raisers. Improvements, tending to cleanliness and hygiene, have been made in many of the fish-curing yards, the curers being helped where necessary by loans from Government. Research work was mainly concentrated on the life-histories of the oil-sardine and the mackerel, the two most important fishes of the Madras Coast, and on the habits of the flying-fish. The department continued to supply zoological specimens to educational institutions throughout India. Good financial results are being obtained from the inland piscicultural section which has had considerable success in the stocking of tanks with edible varieties in addition to continuing its anti-malarial work. The fishermen's co-operative societies are flourishing and temperance and educational work among them, though hampered by political agitation and the Māppilla rebellion, shows satisfactory progress.

15. *Industries.*—In view of the financial stress and the consequent want of scope for development it was deemed desirable to reduce the industrial engineering staff and a reorganization was carried out which has decreased the cost by some Rs. 40,000. The advisory Board of Industries sat at frequent intervals throughout the year; the most important of the multifarious subjects discussed at its meetings was the

question of State aid to industries, to provide for which a Bill was introduced in the Legislative Council where it was received and passed with enthusiasm. There was an increasing demand for the assistance of the intelligence bureau, which aims at aiding new industries and expanding existing enterprises by supplying private persons with expert advice on suitable markets, sources of raw materials and similar questions. The demands on the soap factory at Calicut continued to increase, and the buildings for the Industrial Institute at Coonoor having been completed, it is hoped that jam-making will soon be established on a commercial basis. A demonstrational textile institute was opened, and the expert on the staff of the department introduced several time-saving appliances for the use of weavers. Ten weaving parties toured the Presidency demonstrating the advantages of improved appliances and methods. The department undertook for the first time the control of sericultural work, and towards the end of the year a demonstrational mulberry farm was opened. In chemical research work, the features of the year were investigations into the process of coir production and the utilization of limes and tamarinds as sources of citric and tartaric acids. There is already a considerable demand for the ink and glue manufactured by the department. The Trades School and the Leather Trades Institute did good work; but, as in previous years, the bulk of the technical education of the Presidency was provided by aided schools, forty-one in number.

16. *Public Works.*—Considerable reductions in the establishment were carried out as a measure of retrenchment and the general financial conditions of the Presidency restricted the building programme of the department to the few items which were of such imperative urgency that they could not be postponed. Owing to the high cost of labour and materials, however, the actual expenditure on works, though Rs. 5 lakhs less than in 1921, was not much less than in the preceding year. Money could not be found for the construction of houses for Government servants, though the want of accommodation both in Madras and in the mufassal is causing serious inconvenience. High costs of execution have caused the postponement of various irrigation works also and the officer placed on special duty in 1921 to revise the various projects under consideration had to close his work before he had been able to deal comprehensively with the whole Presidency. Works actually in progress were, however, pushed on and the Toludur project in particular is nearing completion. The experiment of handing over the management of certain channels in the Gōdāvari delta to village panchayats continued to be justified by results.

17. *Local Self-Government.*—An Act was passed in 1921 laying down that every member of a local body should make an oath or affirmation of allegiance to the Crown before taking his seat. The intention was to eliminate non-co-operators whose hostility to the Government was so extreme as to prevent them publicly owning allegiance, though generally the passing of the Act has had a salutary effect upon the constitution of the local bodies. One municipal council, however, against which no imputation of hostility could be made, ceased to function because, owing to oversight, none of its members took the oath within the prescribed time and the council had to be dissolved and re-constituted. Another council

which had been dissolved in 1921 because it was unable to withstand the non-co-operation campaign, was re-established, and the few other councils which had not already been re-constituted under the Municipal Act of 1920 were so constituted in 1922. Progress was made in the re-constitution of taluk and union boards under the Local Boards Act of 1920 and over 120 village panchayats were established under the Village Panchayats Act of the same year.

18. *Public health.*—The condition of the public health during the year was on the whole satisfactory. There was an increase in the birth-rate and a decrease in the death-rate under all the important heads of death causation except small-pox ; the rate of infantile mortality fell below the 1921 figure. The number of vaccinations was less than in 1921, but the percentage of success was appreciably above the unsatisfactory figure of that year. Relapsing fever broke out in epidemic form in three districts, though the Presidency was believed to be immune from this form of disease. The number of municipalities employing special health officers rose from five to ten, and as a first step in the development of rural sanitation, a public health service manned by a health officer and sanitary inspectors has been inaugurated in five districts.

19. *Medical.*—The financial situation hampered the activities of the Medical Department throughout the year and many important schemes, including the re-organization and improving of the nursing service, the appointment of a Public Analyst, the investigation of Kala Azar and the construction of an adequate Leper Asylum have had to be postponed, and there was little extension of medical relief. Investigation has shown that a very large percentage of the population of the Presidency is infected with hookworm and a scheme for an intensive anti-hookworm campaign has been prepared. The existing medical institutions and colleges carried out a year of steady work under restricting conditions.

20. *Education.*—With the introduction of the Elementary Education Act and the formation of District Educational Councils, the agency for the inspection of schools is about to be re-organized ; a District Educational Officer will be appointed in each district, with Deputy Inspectors working under him in place of the former Sub-Assistant Inspectors and Supervisors. A Bill providing for the re-organization of the Madras University was introduced into the Legislative Council and referred to a select committee and a scheme for the formation of a separate University for the Telugu districts is under consideration. The policy of Government being now to withdraw as far as possible from the direct control of elementary schools, 150 girls' schools have been transferred to the control of local bodies, which will be subsidized by Government to an extent approximately equal to the recurring cost thrown upon them. During the year compulsory elementary education was introduced in six municipalities for boys only and in one municipality for both boys and girls. Increasing attention was paid to the vocational side of school training, and vocational and manual training classes were opened in various schools. Sanction was accorded for the opening of an industrial school at Rānipet and to the certification of this school and of the Reformatory School at Chingleput as junior and senior certified schools under the Madras Children's Act, 1920. The number of

women's colleges rose from three to four, and Government sanctioned the permanent retention of the L.T. class in Queen Mary's College, Madras. Certain concessions were granted to local bodies to permit them to provide at their discretion for religious instruction in schools under public management, while preserving at the same time an attitude of strict religious neutrality.

21. *Publicity.*—The Publicity Department under a paid officer with an advisory board of twenty non-official gentlemen continued to carry on the good work begun in 1919. Over two and a half million copies of various leaflets in English and the chief vernaculars were distributed during the first eleven months of the year. These treated of a wide diversity of subjects, including the work of the new Councils, the duties of citizenship, prevention of disease, housing, agricultural improvements and most of the important topics of the day. The library and reading room were used by an increasing number of enquirers; the number of honorary correspondents rose to 21,890 by the end of November; and valuable work was done in answering enquiries on all subjects from every class in the Presidency.

PART II

THE REPORT

CHAPTER I

PHYSICAL AND POLITICAL GEOGRAPHY

PHYSICAL

PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE AND CHIEF STAPLES

Situation and boundaries of the Presidency

1. The present Madras Presidency, or the Presidency of Fort St. George, occupies the southern portion of the peninsula from latitude 20° 18′ on the eastern coast and latitude 14° on the western coast to Cape Comorin in latitude 8° 4′ ; the longitude ranges from 74° 9′ to 85° 15′. The extreme length of the Presidency, from north-east to south-west, is about 950 miles and its extreme breadth about 450 miles. The coast-line commences on the north-east at the confines of the large salt lagoon called the Chilka Lake in the Bengal district of Cuttack, and gives a boundary successively to Ganjām, Vizagapatam, Gōdāvari, Kistna, Guntūr, Nellore, Madras, Chingleput, South Arcot, Tanjore, Rāmnād and Tinnevelly districts, and a small portion of Travancore State, about 1,250 miles of coast in all, being washed by the Bay of Bengal, Palk's Strait, and the Gulf of Manār. The coast-line commences on the north-west at the village of Shirūr a few miles south of Bhatkal near the Honāwār estuary, the boundary between the Bombay district of North Kanara and the Madras district of South Kanara, and gives a boundary successively to South Kanara and Malabar districts, Cochin and Travancore States and the district of Anjengo which lies within the limits of the Travancore State, this coast-line of about 450 miles being washed by the Arabian Sea. On every side but the north, the Presidency is washed by the open sea. The irregular northern boundary has been formed by accidents of history. On the extreme north-east is the Province of Behar and Orissa ; next come the highlands of the Central Provinces ; then, across the greater part of the peninsula, the Dominions of the Nizam of Hyderabad, separated from Madras by the Kistna river and its tributary the Tungabhadra ; lastly, on the north-west by west, the districts of Dhārwār and North Kanara in the Bombay Presidency. The following description leaves out of account the Mysore and Coorg territories, which geographically form as much a portion of the Presidency as do the tributary States of Travancore and Cochin on the south. The Amīn Divi and Laccadive Islands form for administrative purposes a part of the Madras Presidency, being attached to the districts of South Kanara and Malabar respectively. Off the south-east lies the British colony of Ceylon, separated by a shallow strait across which runs the string of rocks and sandbanks known as "Adam's Bridge." The Madras Presidency or the Province subject to the Government of Madras comprises 27 districts, among which are numbered the City of Madras and the recently-constituted Agency division. The latter was formed by the amalgamation of the old Agency tracts of the Ganjām,

Vizagapatam and Gōdāvari districts and is under the control of a separate Commissioner. There are five Native States, viz., Sāndūr, Banganapalle, Pudukkōttai, Cochin and Travancore. The Presidency has a total area of 142,260 square miles excluding the area occupied by the five States mentioned above.

Mountains

2. From a physical point of view the Presidency may be roughly divided into three portions, the long and broad eastern coast, the shorter and narrower western coast, and the high tableland in the interior. These divisions are determined by the two great mountain ranges of the Eastern and Western Ghâts, which give the key to the configuration of all Southern India. The two chains extend along the opposite coasts, parallel to each other, or rather diverging, and leaving between them and the sea only a plain of forty or fifty miles in breadth. They rise in few places above 3,000 or 4,000 feet high, but they are very rugged and steep, and the entrance into the interior is only by very narrow and difficult passes, whose name of "ghât" has by popular usage come to signify the mountains themselves. The Eastern Ghâts, which lie entirely within this Presidency, form a continuation of the hill system of Chutia Nāgpur. They run in a south-westerly direction almost through the entire length of Madras, until they lose themselves in the Nilgiris, and there meet the western range. Their average height is 1,500 feet, and for the most part they leave a broad expanse of lowland between their base and the sea. Their line is pierced by the Gōdāvari, Kistna and Cauvery rivers, as well as by minor streams, so that they do not perform the part of a watershed. The Western Ghâts, on the other hand, which stretch southwards continuously along the shore of the Indian Ocean from the north of Bombay, possess all the characteristics of a mountain range. Rising steeply at a distance of 10 to 50 miles from the coast they catch the greater part of the rainfall of the monsoon. Some of their peaks attain an elevation of from 5,000 to 8,000 feet. Though steep and stony, the hills are not broken, but covered generally with a stratum of earth, sustaining stately forests, particularly of bamboo, which is found nowhere else in equal perfection. The interior, between these two chains, consists chiefly of successive tablelands supported by the opposite ghâts and by chains crossing from one to the other and dotted here and there with isolated and precipitous rock pinnacles, capped with the almost impregnable fortresses of more troubled times. The most southerly central tableland, with an elevation of from 1,000 to 3,000 feet, includes the whole of Mysore and extends over several of the Madras districts. There are again in the south various minor hill systems. The Nilgiris, which form the junction of the two main ranges, culminate in Dodabetta, at one time regarded as the highest peak in Southern India. There are also outlying spurs and masses of hills, of which the Shevaroys in Salem, the Ānamalais in Coimbatore, and the Palni Hills in Madura are the most important. At the Palghat gap the Western Ghâts fall to a height of 1,000 feet above sea level, by a break 25 miles wide through which runs the principal railroad of the south of India. They then resume their course at full level down to Cape Comorin, and immediately widen out into the highland tract that lies between Madura on the one side, and Malabar, Cochin and Travancore on the other; this highland is known as the Ānamalais in the Coimbatore district and the Palnis in Madura. The hill tract here mentioned, higher than the Nilgiris in parts, and much more extensive, becomes narrower again opposite the Cumbum valley in Madura, and behind Tinnevelly becomes only a mountain range between the two coasts with a restricted area. The Ānaimudi mountain in the Ānamalai range is now known to be the highest in Southern India, its summit being 8,837 feet above the level of the sea.

Rivers

3. The three main rivers of the Presidency are the Gōdāvari, the Kistna and the Cauvery; all sacred in the eyes of the Hindu, and truly valuable by their services to irrigation and commerce. These rivers have the same uniform features. They rise in the Western Ghâts, and run across the peninsula in a south-easterly direction. They drain rather

than water the upper country through which they flow, and are comparatively valueless there either for navigation or irrigation. But they spread over alluvial deltas before they reach the sea, and at that stage become capable of being restrained and utilized by the engineer. The estimated basin area of the Gōdāvari is 112,000 square miles, and its length is 898 miles. The estimated basin area of the Kistna is 97,000 square miles, and its length is 800 miles. The estimated basin area of the Cauvery is 28,000 square miles, and its length is 472 miles. Each of these rivers has a large tributary system of its own. Other rivers on the east coast, of similar character but smaller dimensions, are the North and South Pennar or Pinākini (the southern being called Ponnaiyār), the Pālār, the Vellār, the Vaigai and the Tāmbraparni. The area of country drained by rivers running westward is only the narrow strip of territory between the Western Ghâts and the sea. As a rule, the country slopes gradually from the eastern base of the western mountain-chain down to the Coromandel coast, while the fall is sudden and precipitous on the western side of the mountains.

Lakes

4. It is somewhat remarkable that in so large a region as India, with so many mountains and waters, there should scarcely be a lake. So-called lakes are the Chilka on the Coromandel coast, at the confines of this Presidency, and the Pulicat Lake on the same coast within the Presidency. But these are really mere salt marshes like the Mareotis or Menzaleh. Pulicat Lake, about 37 miles in length from north to south, forms a backwater which used to be more or less important for inland communication between Madras City and the northern districts. This lake is supposed to have been caused by the sea breaking in through the low sandy beach. On the western coast, the perpetual antagonism between the mountain torrents and the ocean has produced a remarkable series of backwaters or lagoons, which skirt the entire seaboard of Kanara, Malabar and Travancore. The largest is the backwater of Cochin, which extends from north to south for a distance of 120 miles. These back-waters also are used for inland navigation. A projecting spur of the ghâts for a long time interrupted communication, but this has been tunnelled, and continuous water communication is provided by this means between Cochin and the capital of Travancore.

Climate

5. The peculiar physical geography of the peninsula with a large mountain-chain running from north to south along its western boundary, is of importance in regard to climate and the productions of the various portions of the country. The western hills have the effect of arresting the lower strata of rain clouds brought up from the Indian Ocean by the periodical winds of the south-west monsoon, and of causing excessive rain precipitation on the narrow strip of coastline on the western side of the peninsula. Where the mountain range is of great height, as between Malabar and Coimbatore, the rain clouds are almost entirely diverted from the districts immediately below the mountains on the eastern side; and while the annual rainfall on the western side may be one hundred and fifty inches, not more than twenty-five inches are usually registered on the eastern side, immediately within the influence of the mountain ranges. Where the mountain-chain is of lower elevation, the rain clouds pass over the hills, and rain is precipitated in uncertain and varying amount over the peninsula to the east of the ghâts; but, except in the northern districts, where the rainy season approximates to that of Bengal, the heaviest rainfall of the southern portion of the eastern division of the peninsula occurs during the period of the north-east monsoon. During the continuance of this monsoon, the western ranges of mountains have a similar effect in arresting the rain clouds, so that at the season of the year when the Carnatic is visited by heavy rain, the western coast districts enjoy clear weather. The climate thus varies considerably in the different parts of the Presidency. The Nilgiri Hills enjoy the climate of the temperate zone, with a moderate rainfall, and a temperature rarely exceeding 80° F., and sometimes falling to freezing-point. On the Malabar coast, the south-west monsoon brings an excessive rainfall,

reaching 150 inches in the year at certain places. The rain clouds hanging on the slope of the Western Ghâts sometimes obscure the sun for months at a time. Along the eastern coast and on the central tablelands the rainfall is comparatively low, but the heat of the summer months is excessive. At Masulipatam the thermometer frequently rises to above 110° F. in the shade, and to 170° in the sun. Observations extending over a period of eighty-five years give an average of 49·03 inches of rain in the year at Madras City ; but this is considerably above the mean of the east coast generally. In the district of Bellary the average annual rainfall does not exceed 23 inches, of which 14 inches are brought by the south-west monsoon across the ghâts. The whole coast of the Bay of Bengal is liable to disastrous cyclones, which not only wreck the shipping in the roads, but have repeatedly overwhelmed the low-lying ports.

Productions

6. To the physical barrier of the Western Ghâts must be attributed not only the vast differences of climate, but also those of the nature of the productions, in the eastern and western divisions of the peninsula. In the former division the uncertainty and capricious character of the rainfall has taught the cultivators of the soil the necessity of making provision for the storage of water for irrigation purposes, and innumerable tanks or reservoirs scattered throughout the country are the result. On the western side of the mountains, however, the necessity for such works has never arisen. There the periodical rains fall with great regularity of time and quantity, and the earth produces so abundantly that, although in certain exceptional years there may be partial failures of crops, absolute agricultural distress as a result of bad seasons is quite unknown. Only three of the twenty-six mufassal districts of the Madras Presidency lie within the influence of the never-failing rains of the south-west monsoon. In the remaining twenty-three districts nature demands the assistance of art in the collection, storage, and distribution of the rain-supply. The chief staples of the Presidency are rice, cholam (a kind of maize), cumbu (a kind of millet), ragi and varagu amongst food-grains ; gingelly amongst oil-seeds ; and chillies, tobacco, sugarcane, plantains and betel-leaf amongst garden crops. Cotton, which may be regarded as a special crop, has a cultivation almost equalling that of ragi. The ground-nut has been extensively cultivated in recent years. The trees most grown for their fruits are coconut, areca-nut, jack, tamarind and mango. Rice is a very important crop in all the districts of the Presidency along the East and West Coasts and in North Arcot and Trichinopoly. It accounts, on the average, for more than a fourth of the area under crop and produces a much heavier outturn, area for area, than most other grains. Cholam, of which there are several varieties grown on different soils and at different seasons, is chiefly raised in the Kistna, Guntūr, Kurnool, Bellary, Anantapur, Cuddapah, Nellore, Coimbatore, Trichinopoly and Madura districts. Cumbu is a very important crop in Guntūr, Salem, Coimbatore and Trichinopoly. Ragi is an important crop in Ganjām, Vizagapatam, North Arcot, Salem and Coimbatore. Coconut palms flourish most luxuriantly on the banks of the estuaries and backwaters or salt water lagoons of the western districts of Malabar and Kanara, and areca-nut palms in the valleys intersecting the lower slopes of the Western Ghâts.

The West Coast

7. When the Konkan territories in Bombay are left behind to the north, all that ever constituted part of the Moghul empire, or at least was regularly apportioned among its provinces, has been quitted. The south of India may be said to reach from this point to Cape Comorin, and to begin with the maritime tract of Malabar. The name of Malabar properly belongs to a kingdom, of which the capital, Calicut, was found by the first Portuguese navigators to be the seat of a considerable dominion under a sovereign called the Zamorin. Under a misconception of the extent of the country the name Malabar was extended to neighbouring countries, and has even been applied loosely to all the western coast of the peninsula as far as the Gulf of Cambay. Considered as the

coast reaching from the Konkan to Cape Comorin, it forms a region 500 miles in length, and 30 or 40 miles in breadth, interposed between the Indian Ocean and the almost continuous chain of the Western Ghâts. This position supplies it with copious moisture. Its surface, rugged, rocky and irregular, may be rendered highly productive with careful cultivation, which is generally bestowed. It yields very large crops of rice, which are exported to Bombay and the northern coasts. But the ancient staple of its European commerce is pepper, produced in greater abundance and perfection than in any other part of the globe. It produces also very copiously the noted Indian luxury, the betel-leaf and areca-nut ; and ginger, cardamoms, and other spices are widely grown. Coffee now forms an important export to European countries. The upper districts abound with fine timber, particularly teak, pre-eminently valuable for ship-building ; also sandal, sapan, and other dyeing and ornamental woods. The region does not contain any fine or flourishing manufactures, unless the modern industry in machine-made earthen tiles be reckoned as such ; but its grain, timber and spices are exchanged for the fine cottons of Gujarat. Social life throughout Malabar presents a very remarkable aspect. The original structure of Hindu society has not been altered by foreign conquests, but it exhibits within itself some forms decidedly in contrast with those which are found elsewhere. The distinctions of caste are carried to an unusual pitch. Before the enforcement of English law, if a cultivator (Tiyyan) or fisherman (Mukkava) touched one of the Nāyars or military class, the Nāyar was considered justified in killing the person so touching him on the spot. The Paraiya class in Malabar were till lately little better than slaves. A class called Nāyadis are excluded from all human intercourse, and forced to wander in unfrequented places, without means of support, except the alms of passers-by. The Nāyars, though classed as Sūdras in the Hindu system, rank immediately under the Brāhmans, the intermediate classes being here wanting. Inheritance among them is under the Marumak-kattayam law and follows the female line. Another striking peculiarity on the Malabar coast consists in the early colonies of Christians and Jews, which still form a considerable part of its population. The former derive from a very well-known tradition the title of Christians of St. Thomas ; their origin does not in reality appear to be much later than the apostolic age. Their original form of worship was not in accordance with the tenets of the Catholic church. The Portuguese, who at an early period became masters of this coast, considering such worship as heresy, compelled them to conform. The Malabar Christians could not, however, be induced to hear the service read in Latin ; the Portuguese therefore conceded this point, and allowed the use of the Syriac. A species of Syrio-Roman church was thus formed. The Jews of Malabar are divided into "white" and "black," forming quite distinct classes ; the white consider the other as comparatively low and impure. In A.D. 490 they obtained the gift of the city of Cranganore ; but having incurred the hostility of a neighbouring raja this settlement was broken up and dispersed. The black Jews have been supposed by some to be Hindu converts ; but it is possible that they were an earlier race of Jews from Palestine. Both tribes possess Hebrew manuscripts of the Old Testament, which appear to be preserved in a state of tolerable purity.

South Kanara

8. In surveying this coast in somewhat greater detail, the first tract met is Kanara, which extends along the sea about 200 miles. The northern part, now in the Bombay territory, is very hilly, and produces chiefly teakwood ; but the southern, a portion of which is called by the natives Tuluva, is well cultivated and exports large quantities of rice. Hindus of the peculiar sect called the Jains are found in considerable numbers in this country. There are also a considerable number of Christians ; but the sea-coast is mostly occupied by a class of Muhammadans called Māppillas, apparently emigrants from Arabia. Through their means Haidar and Tipu were complete masters of Kanara, and the latter carried on a violent persecution against the professors of all other religions.

After the fall of Tipu, however, in 1799, Kanara was annexed to the British dominions and toleration was restored. South Kanara alone now belongs to this Presidency. The principal city of South Kanara is Mangalore, long a flourishing emporium. It suffered in the war between the Mysore Sovereigns and the British Government. Being taken by the British in 1733, it was defended with extraordinary valour against the whole force of Tipu. In the following year it was surrendered by treaty to that ruler, who then dismantled the fortifications. Since coming under British dominion Mangalore has flourished, and carries on a very large export of rice. It is situated on a backwater forming a common estuary to two rivers, one of which is to its north and the other to its south. The port will not admit vessels drawing more than ten feet of water ; but the anchorage at the mouth of the river is good.

Malabar

9. Proceeding southwards, the next district is that of Malabar, which has a sea-board of 150 miles, and contains almost 3,100,000 inhabitants. The soil immediately along the shore is poor and sandy ; but in the interior it consists of hills, the sides of which are formed into terraces, with fertile valleys interposed. Pepper, abundantly raised in the hill-forests of this country, forms the staple of a very extensive foreign trade. Calicut, which first gave to Da Gama an idea of the splendour of Indian cities, was the residence of the Zamorin, whose empire then extended widely over Malabar. Its power was materially broken by unsuccessful contests with the Portuguese, and was finally destroyed by the invasions of Haidar and Tipu. In the struggle which terminated in the downfall of Tipu, Britain derived some aid from the native chiefs who, in return, were invested with the internal jurisdiction of the country subject to the payment of a regular tribute. Between powers placed in so delicate a relation dissensions soon arose ; the conflict terminated in favour of the British, who assumed the uncontrolled dominion of the country, its territory being annexed to this Presidency. The Zamorin is now a stipendiary of the Madras Government. Calicut, the once important capital of Malabar, was entirely destroyed by Tipu ; but, as soon as British ascendency permitted, the inhabitants, animated by that local attachment which is strong in India, hastened to return. It is now a large place with an improving trade. The most remarkable modern city, however, is Cannanore, formerly the seat of a female ruler called the Bībī, and from its almost impregnable position regarded as the mainhold of the Māppillas or Muhammadans of Malabar. The Bībī was till recently allowed to administer Cannanore and the country in its immediate vicinity. She carried on also considerable mercantile transactions with Bengal and Arabia, and included in her sovereignty part of the Laccadives, an archipelago of low coral islets facing the coast of Malabar at a distance of from 75 to 150 miles. They, however, produce nothing but coir yarn and plantains, and are inhabited by poor Māppilla fishermen.

Cochin

10. South of Malabar proper is the small territory of Cochin, which presents the same general aspect as the rest of the coast, and particularly abounds in teak timber. Christian colonies are very numerous in this territory. Cochin, the capital, was the first point at which the Portuguese were allowed to erect a fort. In 1663 it was taken by the Dutch, and was rendered by them one of the most flourishing cities of India. The Raja has maintained his independence better than most Hindu princes. He was merely tributary to Tipu, and under British rule he still controls the internal affairs of his State, though under payment of tribute. Cochin still enjoys a considerable trade. Ten miles to the north is Cranganore, which the Portuguese have made the seat of a Bishop's see.

Travancore

11. The extended line of coast from Cochin to Cape Comorin is occupied by the dominions of the Maharaja of Travancore. They possess all the advantages peculiar to the Malabar Coast. The inland districts, in particular, are remarkable for fertility and beauty. They exhibit a varied scene, consisting of hills clothed with lofty forests, and of winding streams with valleys clad in perpetual verdure. The woods are perfumed

with numberless aromatic plants. Besides the staple article of pepper, Travancore yields ginger, turmeric and inferior species of nutmeg and cinnamon. The Maharaja of Travancore conducts the internal affairs of his dominions, subject to the advice of the British representative, under a treaty of 1805. Travancore, the ancient capital, was situated somewhat up the country in a soil of white sand ; but it is much decayed since the Maharaja removed to Padmanābhapuram and subsequently to a new palace built on the European model at Trivandrum. Alleppey, Quilon and Kolāchel afford convenient havens for trade, though the strong currents which run along the coast render navigation difficult. At the extreme point of the territory of Travancore is situated Cape Comorin, the most southern point of India. A few miles from this stands the southernmost scarp of the Western Ghâts, a bold and commanding feature, which presents to the ocean a lofty hill covered with the most brilliant verdure. The rocks scattered along the shore of the cape render it necessary for the navigator to keep at a distance.

Cape Comorin

12. After turning Cape Comorin the extensive territory is reached to which Europeans have given the name of the Carnatic. It stretches about 500 miles along the coast, stopping somewhat short of the great natural boundary of the Kistna. It is divided into two parts by the chain of the Eastern Ghâts running, like the Western Ghâts, parallel to the coast. One of these divisions is called the Carnatic above, and the other the Carnatic below, the Ghâts ; but the former is better known under the title of Mysore, and the territory on the coast will be here considered the Carnatic proper. It is called also the Coromandel coast ; and, though in its general structure similar to Malabar, it presents some marked differences. The mountains are distant from the sea fifty, seventy, or a hundred miles ; and, instead of being clothed with vast and majestic woods, are in most places naked and rocky. The region is watered by several great rivers, rising in the Western Ghâts, and running across the whole peninsula, among which the Cauvery stands pre-eminent. The ghâts from their great altitude intercept the heavy rains which the monsoon brings on the western coast ; and there are only occasional showers, from May to June, to fertilize the ground and cool the intensity of the heat. Yet, though there are many barren tracts, the country, on the whole, is highly cultivated and very productive. The population of the Carnatic is essentially Hindu. The tide of Muhammadan conquest did not reach it before the fourteenth century ; nor was the subjection nearly complete until the reign of Aurangzeb. A race of Moghul viceroys was then established at Arcot, who on the fall of the empire set up an independent power. Pressed, however, by the overwhelming force of the Rajas of Mysore, they were forced to ask for British aid. The Company readily interposed, and after a long and severe struggle subverted the throne of Haidar and Tipu. The Nawab, however, was unable to maintain his position. On the death of the reigning Nawab in 1801, his successor was made to sign a treaty by which the sovereignty of all his territories was transferred to the Company : and there were reserved to himself only from two to three lakhs of pagodas, and a portion of household lands. The country was then divided into eight districts or collectorates administered by British officers. Arcot and its immediate vicinity is largely peopled by Muhammadans. The rest of the population is Hindu, and the customs and religion of the race have been preserved here in unusual purity. The pagodas are extremely numerous, and rival in splendour those of the sacred cities of Benares and Allahabad. The Brāhmans, not generally oppressed as elsewhere under Muhammadan ascendancy, had entrusted to them by that government most of the civil employments connected with the management of the revenue in the State. Another class, almost peculiar to the southern part of the country, was that of the "pālegārs," originally district officers of the old Nayak Government. They took advantage of the periods of its weakness, and erected castles from which, like the baronial chiefs of Europe in the feudal ages, they plundered and oppressed the surrounding country, and their subjection was the object

The Carnatic

of countless minor expeditions by the British troops. The Carnatic is much more of a manufacturing country than Malabar ; yet it does not produce those fine fabrics which distinguish the Northern Circars. Piece-goods, blue cloths, chintzes, etc., all of a coarser kind, are its principal products.

The City of Madras

13. A detailed survey of the Carnatic may begin with the capital city, whose position, due more to the haphazard choice of the earliest settlers than to the considered selection of later and more discerning colonists, is, from a trade point of view, far from ideal. Madras for long had no harbour, but only an open roadstead scoured by a strong current, and suffered in consequence commercial disadvantages which its present extensive harbour is now successfully removing. On the beach outside the harbour breaks so strong and continual a surf that only a peculiar species of large light boats, the thin planks of which are sewed together with the tough grass of the country, can by the dexterous management of the natives be rowed across it. For minor communications with the shipping and for deep-sea fishing the natives of the coast employ what is called a catamaran, consisting merely of two or three planks fastened together, with which they encounter the roughest seas with wonderful address, regaining it by swimming when swept off by the waves. Fort St. George, placed at a small distance from the sea, was once regarded as a strong and handsome fortress, though not on so great a scale as Fort William at Calcutta ; but more advantageously situated, however, and defensible by a smaller number of men. European Madras is for the most part an assemblage of country houses situated in the midst of gardens and scattered over an extent of several miles. The houses are light and elegant, having columns covered with a fine composition of shell limestone called chunam. The hand of art has covered with verdure a somewhat arid soil. Georgetown is extensive, and its minarets and pagodas, mixed with trees and gardens, are striking from a distance ; but a closer view brings disillusionment.

Chingleput

14. In the vicinity of Madras is the district of Chingleput, originally obtained as a jaghir from the Moghul, and still kept up as a distinct collectorship. Though the soil is generally dry, it is made by industry to yield tolerable crops of rice. Recent experiments on the capabilities of wells equipped with pumping machinery have done much to extend irrigation and the production of valuable crops such as sugarcane and plantains. About thirty-five miles to the south of Madras is Mahābalipur, or the city of the great Bali, called also the Seven Pagodas. It consists of a range of sculptured edifices representing the exploits of Bali, Krishna, and other chiefs celebrated in the Mahābhārata. It is sacred to Vishnu, a colossal image of whom is found in the principal temple. The monuments, though not on the same gigantic scale as in some other parts of India, are well executed. In the interior of the country is the hill temple of Tirupati, one of the most crowded scenes of Hindu pilgrimage.

Pondicherry

15. Proceeding southwards Pondicherry is reached, the seat of French Empire in India. This empire, founded in 1749 by Dupleix, presented for some time a brilliant aspect, and, strengthened by native alliances, threatened to subvert the foundations of the British power in the East. Towards the close of the war of 1756 Pondicherry fell into the hands of the British ; and, though restored by subsequent treaties, never on the renewal of war made any effectual resistance. Pondicherry was raised by the French from a village to be the handsomest European city in India. It contains many fine houses in the European style ; and the high culture of the vicinity, the numerous canals crossed by neatly constructed bridges, the roads planted with trees and partly adorned with statues, give to the surrounding district the appearance of a great garden. The inhabitants have suffered much by repeated hostilities, and their former affluence has never returned in full.

Tanjore

16. The Kingdom of Tanjore was formerly an important territory, consisting of the delta of the Cauvery. The Hindus attach to its stream

a peculiarly sacred character. At Trichinopoly, about 100 miles above the sea, it separates into two great branches, the southern branch retaining the original name and the northern continuation being called the Coleroon. Numerous channels derived from these convert the region into a delta, unsurpassed by any part of Egypt or Bengal in culture and fertility. Art has been industriously employed to improve these natural advantages. The chief produce consists of rice, grain and coconuts, which are largely exported. The population introduced by Moghul conquest has never reached Tanjore, and the Muhammadan portion of the population, centred chiefly on the coast, consists mainly of the descendants of indigenous converts. This country therefore has retained almost entire the ancient religion, constitution and manners of India. It is particularly distinguished by the splendour of its temples and other religious structures. Tanjore was governed by an independent Raja until 1799, when the British caused him to resign the administration, and accept a revenue of a lakh of pagodas, or 3½ lakhs of rupees, with one-fifth of the net revenue of the country. He was also permitted, in time of peace only, to keep possession of the town and fortress of Tanjore. The town of Tanjore is of great antiquity, but since the death of the last Raja, its splendour has waned. Its temple, rising from the ground by twelve successive stages, is greatly celebrated and is considered the finest specimen of that species of structure existing in India. The place is six miles in circumference, and contains two large and strong forts, the smallest of which is about a mile in circumference, surrounded with a broad and deep ditch cut in the solid rock. In one of these forts is the temple, and in the other the palace of the Raja.

Trichinopoly

17. Trichinopoly is a large and strong city, farther up the Cauvery, and distinguished as having been the residence of Muhammad Ali and his son, who under British protection reigned over the Carnatic. The siege of Trichinopoly in 1755 is celebrated in Indian history for the gallant defence made by British officers against the French and their native allies, which terminated in a great part of the former being obliged to surrender. Opposite to Trichinopoly is the large island of Srīrangam formed by the two branches of the river. It contains a temple pre-eminent in magnitude and sanctity, about four miles in circumference, and surrounded by seven successive enclosures. The innermost shrine has never been violated by any hostile power. It is visited by crowds of penitents from all parts of Hindustan, who bestow gifts in return for the pardon of their sins.

18. Among the sea-ports of this region special mention may be made of Negapatam at the mouth of the Cauvery, once the chief factory of the Dutch on this coast, and made by them a strong and commercial place, and now one of the important ports on the east coast. At the mouth of one of the deltaic branches is Tranquebar, which the prudent conduct of the Danish Government converted from a small village to a thriving mart of trade. It is also the seat of an active mission, to which the public is indebted for some important memoirs relative to India. Devakōttai, at the mouth of the Coleroon, was once a considerable British factory, and the first place in this neighbourhood where the British obtained a footing.

Madura, Rāmnād and Tinnevelly

19. The districts of Madura, Rāmnād and Tinnevelly, added to Travancore on the opposite coast, constitute the extreme south of India. They are inferior to Tanjore in natural fertility, and, as some consider, in cultivation. They are less copiously watered, and a not inconsiderable part of their surface is still covered with jungle, formerly the retreat of Pālegārs, whose incursions disturbed the pursuits of industry. Cotton forms the staple product, particularly of Tinnevelly; and a considerable quantity of coarse manufactures is transmitted to Madras. In the situation and structure of the cities of Madura and Trichinopoly strength was mainly studied; but since the country has attained a more settled state, their fortifications have fallen into decay. Madura, a very ancient

city, is regarded by the Hindus as peculiarly sacred. It has a pagoda or temple much more than commensurate with the greatness of the city and one of the most splendid in Southern India. Its population is second only to Madras.

Northern Carnatic

20. The northern part of the Carnatic still remains to be mentioned. It is generally inferior to the southern, and yields no remarkable product, either of land or manufacture. Arcot, nearly in a direct line inland from Madras, was raised to high importance by the Moghul government, who, attracted by its salubrity, made it their capital. It is situated, however, in a barren country, and is surrounded by naked granite hills. Pulicat, close to the sea and with a port, after enjoying for a long time high prosperity as the chief seat of Dutch commerce on the Coromandel coast under the name of Geldria, has, since it came under the power of the British, declined to the position of an inconsiderable village. There was formerly trade here with Penang. Nellore on the large river Pennar formerly exported blue chintzes for the use of the Negroes on West Indian plantations, but this trade has ceased. There is an anicut across the river close to the town, which has supplied the delta south of the river with irrigation for many years ; and another anicut constructed at Sangam, 20 miles west of Nellore, performs the same service for the delta north of the river. The whole of this coast is engaged in the salt industry. Mica-mining in Nellore district has developed in recent years.

Salem, Coimbatore and the Nilgiris

21. Salem district includes a northern and eastern portion once called the Bāramahal or twelve estates, the remainder consisting of country lying on and below the Mysore plateau. The East India Company sought to convert the town of Salem into a manufacturing centre, and a large weaving industry remains to this day. The climate of Salem town is not considered healthy, being liable to sudden alternations of heat and cold ranging up to 25°. This district was the principal seat of the manufacture of Indian steel or wootz. The ore is exposed and needs no mining. The antiquity of the process of manufacture is no less astonishing than its ingenuity, for its theory is extremely erudite, and in its discovery there seems little room for the agency of chance. Above the town of Salem tower the Shevaroy Hills. The name of the old Konga kingdom, which disappeared from history eight or nine centuries before the Christian era, survives in Kāngayam in the adjoining Coimbatore district. The fauna of Southern India abound in this part of the country. The town of Coimbatore lies high and is a favourite station with Europeans. On the western confines of this district lie the Nilgiri Hills, the largest hill-plateau in India that has been permanently occupied by Europeans. There are many tea and coffee plantations on the plateau and cinchona, eucalyptus and blue-gum trees are grown there. Ootacamund in the Nilgiris was for many years the headquarters of the Madras Government during the hot weather and is still the place of residence of the Governor for several months in the year.

The Northern Circars

22. The old province of Orissa to the east of Gondwāna in the Central Indian tableland occupied the whole sea-coast of the southern peninsula from the Carnatic to Bengal. The interior of the country, traversed by a portion of the great chain of the Ghâts, is still more rugged than the tableland to the west of it ; it is covered with jungle and infested by hill fever. Various rude tribes have from time immemorial inhabited these wild recesses. They rendered themselves formidable to the Mahrattas : but the influence of British law has converted them into more or less peaceable subjects. The three great rivers, the Mahānadī, Gōdāvari and Kistna, discharge themselves into the sea ; the first towards the northern, and the two latter at the southern extremity of this country. The tract, which has been known as the Circars, and which is the only part of Orissa now assigned to Madras, comprises that southern portion of it which was never securely held by the original Hindu kingdom. The littoral of the Northern Circars is one of the most valuable districts in Hindustān, equal to the

Carnatic in fertility, and, formerly at least, superior to it in manufacturing industry. It is remarkable also as being the first territory of any considerable extent which came under the dominion of the East India Company. In 1759, the French having been driven from Masulipatam, Lord Clive obtained from the Moghul the grant of the territory; and the Nizam, though then in actual possession, was not in a position to dispute the transaction. The internal government has not been materially altered, the villages being ruled according to their ancient institutions; but the power of the zamindars, the principal of whom at the first occupation could assemble 41,000 troops, has vanished. Calicos and chintzes were once the staple manufacture, the finest being produced in the delta of the Gōdāvari. These manufactures were exported to Europe and various parts of the East, but particularly to Persia, where the demand for them was most extensive. Modern competition, however, on the part of Bombay and England has gone far to destroy the industries. The principal exports now are in natural products. Manganese mines in the Vizagapatam district have been developed; graphite is found in the Gōdāvari district. The Circars were, under the Muhammadan government, five in number: Guntūr or Murtazanagar, Kondapalle or Mustafānagar, Ellore, Rajahmundry and Chicacole; with the coast strip of Masulipatam added. But this nomenclature has been altered by the modern distribution of revenue districts. The important trade of this tract used to centre almost entirely in Masulipatam, a large sea-port with the best harbour in the whole coast from Cape Comorin northwards. More than half of its exports were to Bussora, the rest chiefly to Madras, which it supplied with a considerable quantity of grain. This place, however, has in its turn lost its natural advantages, and has been replaced by Cocanada, which has canal communication with the deltas of the Gōdāvari and Kistna rivers.

The Ceded Districts

23. The Ceded Districts will complete the account of the Presidency. They form the Bālāghāt or highlands of the old Hindu Vijayanagar kingdom, as opposed to the Payan Ghât or Talaghāt or lowlands, already described above under the title of Carnatic. In the concluding years of the eighteenth century French troops alternated with British troops in the support of the Nizam at his capital. But in 1798 the Earl of Mornington finally established a British force there, and in 1800 at the conclusion of the third Mysore war the most southerly of the Nizam's territories lying below the Tungabhadra river were ceded to the British as payment for that force. Thus a large tract of country was added to the British possessions in the south, which carried their power from the coast to the centre of the peninsula. The Native State of Mysore was at the same time encircled. The character of this country does not differ materially from that of the Deccan plateau. Bellary, the most westerly of the provinces, and including at that time what are now Anantapur and Kurnool districts, is throughout a highland; the most elevated part being to the west where the surface rises towards the culminating range of the Western Ghâts, and to the south where it rises to the tableland of Mysore. Towards the centre of the country the plateau presents a monotonous and almost treeless aspect. Water is scarce, and fodder difficult to procure. The present district of Kurnool lies to the east of Bellary. The central portion consists of a valley of black-cotton soil. Anantapur, south-east of Bellary, was once the western limit of the real Kanarese country. The Cuddapah district is the fourth division of the Ceded Districts, and its most mountainous part. The town of Cuddapah is situated in a depression, and the northern part of the district is much lower than the southern. The climate of the principal town itself is marked during the hot season by great heat during the day and oppressive closeness during the night.

POLITICAL

HISTORICAL SUMMARY

Introduction

24. In any enumeration which may be made of the literature proper to this country, one capital defect must be obvious, that history finds in it no place. The legends of Indian mythology may be plausibly supposed to have a foundation in the story of some celebrated early kings or conquerors, but it is scarcely possible through the mist of fable even to conjecture anything respecting the real existence of these personages or the events connected with them. The Grecian Iliad and Odyssey are in comparison with Hindu legends plain and authentic chronicles. Indian chronology, like that of the Greeks, is divided into four ages, of which three are fabulous, and the first consists of nearly 2,000,000 years. Antiquarian research is only by degrees finding means of supplementing the deficiency caused by the absence of materials constructed or collected by normal methods.

Periods preceding known Dravidian dynasties

25. The history proper of the south of India may be held to begin with the Hindu dynasties formed by a more or less intimate mixture of the Aryan and Dravidian systems of government. But, prior to that, three stages of historical knowledge are recognizable : first as to such aboriginal period as there may have been prior to the Dravidian : secondly as to the Dravidian period proper : and thirdly as to the period when the Aryans had begun to impose their religion and customs upon the Dravidians.

Aborigines

26. Human remains and traces have been found on the East Coast of an age which is indeterminate but apparently beyond the ordinary calculations of history. They are material here in so far as they are connected with the question whether there was or was not a population of Southern India earlier than the Dravidian. In this part of the world, as in others, antiquarian remains show the existence of peoples who used successively implements of unwrought stone, of wrought stone, and of metal fashioned in the most primitive manner. These tribes have also left cairns and stone circles indicating burial places. It has been usual to set these down as earlier than Dravidian. But the hill Kurumbas of the Palmaner plateau, who are only a detached portion of the oldest known Tamilian population, erect dolmens to this day. The sepulchral urns of Tinnevelly may be earlier than Dravidian, or they may be Dravidian. It has been alleged that the Kolarian races of the north-eastern part of the peninsula, whom various considerations show to be in a measure more primitive than the Dravidian races, preceded them in Southern India. This is not demonstrable. According to some theories the wild tribes of Southern India itself are physiologically of an earlier type than the Dravidian tribes. The evidence of the grammatical structure of language is to be relied on as a clearly distinctive mark of a population, but from this point of view it appears that there are more signs of the great lapse of time than of previous populations. The grammar of the south of India is Dravidian. The hill, forest, and paraiya tribes use the Dravidian forms of grammar and inflection. The vocabulary alone of the rude dialects may yet be found to give traces of ancient pre-Dravidian languages. The worship of serpents, and that mysterious form of combined worship addressed to trees and serpents together, pertains perhaps rather to Mongolian races than to the Dravidian races proper. It has undoubtedly prevailed in Southern India, and, if this has been so generally and not sporadically, it is an argument for the existence of populations prior to the Dravidian. The worship of serpents,

living and in effigy, still survives. The habits and customs of the people exhibit that most remarkable breach between one section of the population and another which is expressed by the terms "Hindu" and "out-caste." This may be a religious or caste distinction effected by Brāhmanical influence, or it may indicate an essential difference of race. The social breach is so wide as to furnish the strongest argument that exists for regarding certain tribes as earlier than the Dravidian in their origin. Polyandry, the most noticeable social peculiarity of Southern India, belongs as much to the Dravidians as to any other race. As regards native chronology it need only be said that the local traditions of the oldest portion of Chera Mandalam or South Travancore make the Dravidian dynasty of that country co-eval with the origin of the world. The arguments have been stated for considering that there was a population earlier than, and distinct from, the Dravidians. It will be seen that history is almost silent on the subject.

Dravidians

27. The theory that the Dravidians came to India from without, passing over the north-west boundary and through Sind, does not rest on certain evidence. This movement appears to have been the characteristic of much later races. If the Dravidians moved into India at all, they may have emigrated from the south or the east. As far as present evidence goes, however, they are indigenous to India, and perhaps specially indigenous to Southern India. The Dravidian terms indicating direction, which must be very primitive, are derived from the configuration of the southern peninsula. The east is கிழக்கு (kizhakku) or "down" and the west is மேற்கு (mērku) or "up"; that is to say, the country sloping to the coast and the country rising to the Western Ghâts. The Dravidians may have been at first nomads in India. Numerous local traditions testify to minor migrations. The original strength of the language of the Dravidians is shown by the great persistence of its grammatical formations through all the vicissitudes of history. The early Dravidians perhaps had for religion a worship of the spirits of ancestors, coupled with that of hostile demoniac personages of various descriptions. When religious observances developed they appear to have taken the form of the sacrifice of living animals, and the peculiar rites of devil-priests. The fishermen of the south, dependent on the moon's phases for their operations, early developed a primitive lunar computation of time. The agriculturists of the plains observed the seasons and movements of the sun. The astronomy of the Dravidians thence arising was first lunar and then strictly solar-sidereal. The vocabulary and institutions of the people show that they had a highly developed practical astronomy before they were touched by Brāhmanical influences, and their system still holds its ground in many respects. The Jovian cycle of five revolutions of Jupiter or sixty years, which regulates the chronology of the Tamilians, is no part of the Aryan system. The familiar period of twelve years for domestic events among the Tamils has the same derivation, and is similarly independent. The religious festivals which are proper to the Tamilians can be called fixed, varying only with the fluctuations between diurnal and solar time, and differing from the Hindu festivals which vary extensively under the lunar-sidereal system of the Indian Aryans. The Dravidians knew all the ordinary metals indigenous to the country. Spinning, weaving and dyeing were common arts. The Dravidians possessed considerable constructive, if not architectural, power. The Amarāvati Stupa and the rock-cut temples at Mahabalipur may have been produced in later ages under Brāhmanical or Buddhist influence, but they are a development of strictly indigenous art.

Aryans

28. The date of the first settlement of the Aryans in Southern India is more obscure than that of the first arrival of Aryans in India. As far as is actually known from direct evidence, the first Aryans who settled permanently in the south were hermits, who by civilizing the people round about them gradually opened a pathway for more effectual invasions. The most prominent name among these ascetics is that of Agastya, who

is celebrated for the influence he acquired at the court of Kulasekhara, according to tradition an early Pandyan king. He is called the Tamizh Muni, or Tamilian sage. The mountain from which the Parni or Sanskrit Tamraparni takes its rise is still known as Agastya's hill. The Aryans abandoned their own language in Southern India in favour of the Dravidian languages, and at the outset at any rate modified to a great extent their own religion and customs. In Coorg there is no Brāhman influence even to the present day. The ascendency of the Brāhmans was brought about gradually and by the arts of peace ; for if it had been effected by warlike means some traditions of the fact would have survived. There are however none such, and all existing traditions, and the names by which the Brāhmanical race is distinguished in Tamil, viz., அய்யர் (ayyar) or "fathers" and பார்ப்பார் (pārppār) or "overseers," * seem to point to power gained by means of administrative ability, rather than by violence. A large number of inscriptions in Brāhmī characters have been recently discovered in natural caverns on hills chiefly in the Madura and Tinnevelly districts These are in a language which has not yet been deciphered ; but show, at any rate, the Aryan influence, at least in script, prevalent in the second or third century B.C. It is not unlikely that the language of these records is strongly influenced by Dravidian, if not Dravidian itself.

Dravidian dynasties

29. The occupants of the South of India were, at the earliest period for which any records archæological or otherwise can be found, Dravidians ruled over by kings taken from the same stock as themselves. They were, however, to an extent which cannot be determined, under the influence of Aryan settlers. It is almost certain that the only representatives of the Aryans were Brāhmans ; these were probably located in the larger towns alone and came little into contact with the agricultural population ; the Sanskrit names given to places existed probably only in the Sanskrit writings of the settlers. And the same may be said without hesitation of the Sanskrit names given to the Dravidian rulers, and derived for the most part from the Solar, Lunar and Agnikula families of the north. The tribes and dynasties of the Dravidians were extremely numerous. The Tamil country in the extreme south is traditionally divided between the three principal kingdoms or mandalams of Pāndya, Chola and Chera. The West Coast developed an independence. On the north-east, the kings of Kalinga at one time ruled over the entire line of seaboard from the Gōdāvari to the Ganges. The eastern coast was occupied by a Pallava kingdom, which was perhaps almost as ancient as the southern kingdoms. But to these principal kingdoms might be added a great number of smaller kingdoms. The inhabitants of the three mandalams spoke the ancient Tamil language, and employed a written character known now by the name of Vattezhuttu ; the origin of this is doubtful. The most celebrated ancient Tamil literary works, such as the Tolkappiyam and the Kurral, were probably written originally in this character. The West Coast nations spoke Malayalam, the North-East Coast nations spoke Telugu, and the inhabitants of the South Deccan spoke Kanarese. These are forms of the Dravidian language later than Tamil.

The Pāndya Kingdom

30. The Pāndya kingdom as it is called by the Sanskrit writers, or the Pāndi kingdom as it is called by the natives of the country, was the most prominent dynasty in the extreme south when the Aryans first made acquaintance with it. It is mentioned by the name "Pānda," in Asoka's inscriptions, which are dated 260 B.C., together with the Cholas under the name of Chodas and the Chera ruler under the name of Ketalāputra ;

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* These are the most obvious interpretations of the terms. The following note, however, is supplied by M.R Ry. Rao Sahib H. Krishna Sastriyar Avargal, Assistant Archæological Superintendent for Epigraphy, Madras :—"I do not think '*ayyan*,' plural '*ayyar*' at the end of proper names is a Dravidian word It must be a corruption of the Sanskrit '*arya*.' The derived forms '*ajja*' and '*ayya*' are still current in Prākrit. Consequently '*ayyar*' must mean 'the noble'; and '*pārppār*' similarly when applied to Brāhmans was meant to be interpreted metaphorically as 'those who saw into things,' i.e., who knew, or possessed wisdom. I would therefore substitute for 'fathers' and 'overseers' the words 'the noble' and 'the wise.' The ending '*appa*' in the names of Brāhmans and non-Brāhmans of the Kanarese and Telugu countries does, however, mean 'father.'"

but only the names are enumerated. Megasthenes, who was sent in 302 B.C. as ambassador from the court of Seleucus Nicator of Babylon, to Chandragupta, king of Pataliputra, in connexion with the affairs of the Indian Empire, recorded the existence of a kingdom called Πανδαία in the extreme south. *B.C. 302* Strabo in A.D. 20 gives an account of an embassy sent by the Pāndyan ruler, probably from the West Coast, to the Emperor Augustus. Golden aurei of that Emperor's coinage have been found on the West Coast. Pliny later in A.D. 77 calls these people the Pandae, and says that they were the only race in India ruled by women. *A.D. 77* Speaking of a portion of the West Coast, he states that it was then under the rule of the Βασιλεύς Πανδίων "far from his inland emporium at Modoura." The Periplus of the Erythræan sea about A.D. 80 makes a similar remark, *A.D. 80* assigning Travancore, south of Alleppi at least, to Pāndya. The title of their ruler was either Pāndyan, Maran or Sadaiyan. According to Tamil literature the boundaries of the Pāndya kingdom were as follows : on the north the Pudukkōttai Vellār falling into the sea south of Point Calimere ; on the south Cape Comorin ; on the east the sea (that is to say, the Gulf of Manār and Palk's Strait) ; on the west according to some authorities "the great plain" or "peruveli," according to others the town of Vannasi, and according to some others the great pass or "peruvazhi." The most ancient capital of the Pāndya country was Korkai (the Κόλχοι of the Periplus) at the mouth of the Tambraparni river. Korkai was the seat of Government in the time of Vijaya. It was esteemed even by the Greeks several centuries later as the first port in Southern India, and they named from it, the κόλπος Κολχικὸς or Gulf of Manār. As the point where the more modern Aryan and Grecian civilizations each in turn met the ancient Dravidian civilization, it is a place second in interest to none in India. It is now represented in name by an insignificant village five miles from the coast, but excavations in the neighbourhood show the remains of a once extensive area of human habitation. Even when Korkai, being left inland owing to the deposits of the Tambraparni river, gave place to Kayal, the latter port nearly monopolized the trade between Southern India and China and Arabia. Under the influence of modern coast changes the centre of commerce again shifted, but only slightly more north to Tuticorin. The chief industry of Korkai was probably the pearl-fishery, and its chief commerce the export of rice, two causes sufficient to collect an important oriental population. The migratory habits of the pearl-oyster have rendered the South Indian fisheries precarious, and the failure of these may have led to the abandonment of the coast as the seat of the Pāndyan Government. After Korkai there is some evidence that a place called in Sanskrit Kalyanapuram was made the capital ; if so, its site cannot be identified. After this at any rate Madura (Μόδουρα in the Greek) became the chief city, having been founded possibly about the end of the fourth century B.C. The site of even this city has probably been shifted more than once. Thus old Madura is on the north bank of the Vaigai, and about a mile from the present city which is on the south bank. A few miles to the east are the ruins of another ancient city, Manalur, which it is supposed was also at one time the capital. For the purposes of the history of the earliest period it is sufficient to state that the Pāndyans were constantly at war with the Cholas lying on their north-eastern border, but were usually at peace with their neighbours to the west ; facts for which the geography of the country will account. In the early ages of the Christian era again they formed an alliance with the Cholas, which lasted for a while, till hostilities were resumed. The Pāndyans retained the old Vattezhuttu written character till a very late period. One of the oldest segments of the Tamil race is the Marava race, who once boasted a dynasty of their own, north of the Vaigai river and were interposed between the Pāndis and the Cholans in the neighbourhood of the coast. In the earliest times they were tributary to Pāndya.

The Chola Kingdom

31. The original meaning of the Tamil name Chola, properly Chozham, is southern. Cholamandalam or the realm of the Cholas is

held to be the origin of the term Coromandel applied by foreigners to the peninsular shore of the Bay of Bengal. The word Chola appears in numerous names of places, a familiar example of which is Sholingar in the North Arcot district. As above mentioned the Asoka inscriptions speak of the Cholas under the name of Chodas. The Chola kingdom lay to the north-east of the Pāndyan kingdom. The capital was first Oraiyur, afterwards Tanjore, and finally a place called Ganjaikonda Cholapuram, near the present Trichinopoly. All tradition points to the Chola kingdom as being of the same age as the Pāndyan. The Cholas were constantly at war with the Pāndyans and also with Ceylon. Their early history, however, is almost a complete blank; and there is not even a list of kings, real or imaginary, as there is in the case of the Pāndyans. The Cholas began to be prominent about the middle of the ninth century of the Christian era.

The Chera Kingdom

32. The name Chera like Pāndya means, in ancient Tamil, "toddy or palm juice." It is the oldest known name for Travancore. This kingdom was before historic times eclipsed to a great extent by others. As above mentioned the Asoka inscriptions speak of the Chera ruler under the name of Ketalaputra. Chera is always spoken of in tradition as well as in the written authorities as contemporary with Pāndya and Chola. Cheramandalam is by some held to have included the present Mysore, Coimbatore and Salem, the old Tondainad, and the present South Malabar and Cochin. To the south-east at any rate it was always confined by Pāndya and Chola. A tradition places the tri-junctional point of the Pāndya, Chola and Chera kingdoms on the banks of the Karaipottanaru, a small river entering the Cauvery eleven miles east of Karur. Various principal towns assigned to Chera are Karur, Avanasi and Salem besides other places on the West Coast. Long lists of original Chera kings are preserved. This kingdom, however extensive, was not according to record at any time belligerent. Its strength was the commerce of the south-western ports. It is related that the Pāndyan ruler when invaded by enemies was in the habit of resorting to the king of Chera. South Travancore itself has throughout history preserved an immunity from foreign invasion.

The Kerala Kingdom

33. On the Malabar coast north of Travancore, a part of the country which was early Brāhmanized, the word Chera was converted into Kerala; and this is the form used in Sanskrit for the whole Chera peoples and countries. The boundaries of Kerala are rather indeterminate. In its widest sense, it extended from Gokarna to Cape Comorin. The history of early foreign rule in Malabar is confused, and Chera, Chola and Pāndya may have all exercised sway over different parts of it, or over the whole of it at different times. According to Arrian and Pliny, Malabar was included in the Pāndyan kingdom in the early ages of Christianity.

The Kongu Kingdom

34. Another portion of the old Cheramandalam was the Kongu country. This is not defined by native authority, but comprised approximately the present districts of Coimbatore and Salem. The ancient capital was Skandapuram, perhaps near the present Gejalhatti Pass, formerly the highway from Mysore to Trichinopoly. In the third century of the present era the Kongu capital was transferred to Talakad on the Cauvery, and all the south of the Mysore country appears to have been then included.

The Pallava Kingdom

35. The Pallavas were either the ruling power among the Kurumbas, or superseded them. This people is not mentioned in the Asoka inscriptions, or by the most ancient foreign nations. The Pallavas are identified originally with the basin of the Palar, the river which disembogues at Sadras. This country was later known as Tondaimandalam, or the country immediately surrounding the present capital of Southern India. Their first known capital was Conjeeveram. They are reputed to have been the constructors of the monolithic raths at Mahabalipur or the Seven Pagodas. They had also a centre at Puzhalur, near the modern Red Hills, ten miles north-west of Madras.

The Kalinga Kingdom

36. The Kalinga realm may be included among the most ancient. The origin of the term is not known, but the Malays still designate all inhabitants of the Coromandel Coast as Klings. The name appears in the modern Calingapatam, Coringa, etc. Kalinga is alluded to in the earliest extant chronicles of India and Ceylon. The oldest Buddhist legends speak of the Kalinga monarchs as rulers of a civilized country. The name ordinarily indicates the country north of the Gōdāvari and south of Orissa, and running inland as far as the Eastern Ghâts, but has also been used to include Orissa, and even the country as far as the Ganges valley. Calingapatam, Chicacole and Rajahmundry were at different times principal places within the limits of Kalinga.

Knowledge of Southern India in the most ancient times by foreigners.

37. The first authentic notice of India is afforded by the invasion of Alexander the Great. The expedition of Seleucus and the embassy of Megasthenes brought to light the existence of an empire, of which the capital was Palibothra on the Ganges. The interposition of the hostile monarchy of the Parthians cut off all land-communications between Rome and India, but one embassy from this country reached the court of Augustus, proceeding by sea from the coast of Malabar. The Periplus of the Erythræan sea gives valuable information as to the commerce of Southern India in the first century of the Christian era.

The Muhammadan conquest

38. The conquest of India by the Arab dynasty of Ghazni in Afghanistan forms the era at which commences a regular account of Indian history supported by written documents. Mahomed the Great united all the west of India, with Khorassan and a great part of Tartary, into one empire. His dynasty was subverted by that of Ghori, another Afghan kingdom, and this was followed by a long series of emperors similarly descended, but ruling at Delhi. In 1398 Delhi was taken by the Tartar Tamerlane. A century afterwards Babar founded again at Delhi the Moghul or Mongolian empire. Along with Afghanistan, it included the whole of Hindustan, and nominally the whole of Southern India. The Muhammadan races first made their influence felt in Southern India and Ceylon many centuries before this period by the establishment of trading emporia on the coasts. On the Malabar coast, Calicut, and, in Ceylon, Manar and Mantotte or Mantai were the chief entrepôts of traffic for the Moorish merchants, who received from agents at various ports the produce of different parts of the East. There was an even closer connexion between the Maldives and the Muhammadan settlements on the Malabar coast, notably Cannanore, resulting in a feudatory subjection of the islands to that state. Delhi had been captured by the Ghazni Ghorians in 1193, *1193*
and a dynasty established there which lasted till A.D. 1288. The Khiljis *1288*
succeeded, occupying the period from 1288 to 1321; and Alá-ud-dín, nephew of Jalál-ud-dín Khilji, led the first Muhammadan expedition into the Deccan in A.D. 1294. Ten years later the Mussálman armies under *1294*
General Malik Kafur swept over the whole of the Deccan. The Yadava Devagiri State and the Ganapathi Warrangal State were then both reduced to subjection; and Dwarásamudra, the capital of the Hoysala Ballalas, was taken and sacked. These early inroads reached even to Tanjore and Madura in the extreme south, but how far the Chola and Pandyan kingdoms were affected politically is not recorded. Anarchy at any rate followed over the greater part of the south, the Muhammadan governors, the representatives of the old royal families, and the minor local chiefs, all engaging in internecine struggles for supremacy. A slight check was given to the spread of the Muhammadan arms when a confederation of Deccani Hindu chiefs, led by a Kakatiya Raja, defeated a large Muhammadan army. The aspect of affairs was later altered by the revolt of the Deccani Muhammadans against their sovereign in A.D. 1347, which *1347*
resulted in the establishment of the Bahmani kingdom of Gulbarga in the Deccan. The Hindus also made one final effort to achieve imperial rule.

The Hindu Vijayanagar dynasty, *1336*

39. While the Muhammadan rebels were consolidating their kingdom in the Deccan, another large power was being formed south of the Kistna. This was the Hindu kingdom of Vijayanagar founded in 1336. The site

of the capital was the present Hampi in the Bellary district. The Vijayanagar kingdom speedily rose to a height of influence such as no southern kingdom had yet attained, and held the Muhammadans in check for two centuries; but not without reverses. At the first conflict
1364 in 1364 between the Bahmani Muhammadans and the neighbouring ruler
1374 of Vijayanagar, the former depopulated the country. In 1374 Mujaid Shah of Gulbarga overran the whole Peninsula down to Cape Comorin. The Bahmani kingdom presently fell to pieces, being succeeded by five separate kingdoms, hereafter to be named, founded by rival Muhammadan leaders. Their jealousies aided the Vijayanagar sovereigns in the
1479 acquisition of power. In 1479 the first Vijayanagar dynasty came to an
1487 end, another being instituted by Narasinha. In 1487 this kingdom completely subverted the Pandyan country, Chola having fallen long before. By the close of the fifteenth century the power of Vijayanagar was acknowledged as paramount through the entire peninsula. Small principalities existed, such as Mysore, the Reddi chieftainship of Kondavid, south of the Kistna, Nellore, the Gajapati dynasty of Cuttack, the Bidars of Harpanhalli, and the always independent principality of Travancore; but Vijayanagar was supreme. Narasinha was succeeded
1509 in 1509 by Krishna Raya, who reduced the whole of the East Coast of the peninsula into subjection. The dynasty in his day reached its greatest height. His minister was a Brāhman, the well-known Timmaraja. The
1516 traveller Barbosa describes the city of Vijayanagar in 1516 as "of great extent, highly populous, and the seat of an active commerce in country diamonds, rubies from Pegu, silks of China and Alexandra and cinnabar, camphor, musk, pepper and sandal from Malabar." The palaces of the king and ministers and the temples are described as "stately buildings of stone." According to the same authority the kingdom comprised the whole of the kingdom south of the Kistna. Ramaraja, the minister's
1564 son, was reigning in 1564 when his kingdom was conquered by the five new Muhammadan dynasties. The kingdom of Bijapur was founded by Adil Shah in 1489. It retained its independence for 197 years, until it was absorbed by Aurangzeb in 1686. The Nizam Shahi dynasty of Ahmadnagar was established in 1487 by Ahmad Nizam. It was subverted in 1637 by Shah Jahan. Imad-ul-Mulk made himself independent at Berar in 1484, and commenced the Imad Shahi dynasty, which was extinguished at the end of ninety years by the king of Ahmadnagar in 1574. Kuli Qutb, a Turkoman, who rose to be Governor of Golconda, established his independence there in 1512. This dynasty was subverted by Aurangzeb in 1687. The dynasty of Bidar was established in 1498 by Ahmad Barid. In 1564 these Muhammadan sovereigns combined, defeated the Hindu army at Talikot, and sacked the capital of Vijayanagar. For a second time the whole of the peninsula was thrown into confusion. The minor chiefs seized the opportunity for throwing off their dependence; and throughout the peninsula arose a large number of petty pālegārs and small chieftains whose quarrels and wars and struggles for supremacy kept the country disturbed for two and a half centuries.

The Nayaks of Madura

40. The only Hindu chiefs that attained to real power after the close of the Vijayanagar dynasty were the Madura Nayaks, formerly viceroys of Vijayanagar. Visvanatha Nayak, a Telugu officer of Achyuturaya, after completing a victorious campaign against Tiruvadirajya (i.e., the Travancore country) appears to have been deputed to conquer Vananaraya who was then powerful in the Pāndya country. After successfully discharging this task Visvanatha secured for himself a permanent footing and was made Governor of Madura. He took advantage of the hostilities between the Rajas of Vijayanagar, and their Muhammadan neighbours, to convert his government into an independency and was succeeded in it by his descendants. The dynasty continued till the middle of the eighteenth century. The greatest of the line was Tirumala Nayak.

Progress of the Muhammadans

41. While the country was in this state the Muhammadans gradually pressed downwards, securing the dominion of the parts south of the Tungabhadra and eastwards to the sea, and encroaching southwards, till

they had reached the lower confines of the Telugu country by the middle of the seventeenth century, and by the beginning of the eighteenth had extended yet further.

European Settlements in India

42. The first modern European nation to establish a settlement in India was the Portuguese, who occupied Calicut and Goa on the West Coast at the beginning of the sixteenth century. Vasco da Gama and Cabral were the pioneers of Portuguese commerce, and Albuquerque laid the foundations of Portuguese power in India. Fierce struggles took place between the English and the Portuguese near Surat and in the Persian Gulf; but the Portuguese power began before long to decline in consequence of the successful attacks of the Dutch and the neglect of their parent country. The Dutch were the second modern European nation to establish themselves in India. After occupying various stations in the Eastern Archipelago, they settled at Pulicat, Sadras, Palakollu, and other places on the eastern coast of Southern India, from the beginning of the seventeenth century onwards. This was the period of the pālegārs, of the Nayak rule at Madura, and of the progress of the Muhammadans southwards. The Dutch rapidly dispossessed the Portuguese of Ceylon and the southern stations on the Malabar coast; but in the next century they were outdistanced by both the English and the French. The Danes came to Tranquebar in Southern India in the seventeenth century; but their occupation of that settlement was wholly peaceful although they more than once came to blows with the troublesome Government of Bengal.

The earliest English Settlements

43. The European nations, as is well known, began their career in this country as merchants. In order to carry on their business, they erected factories, which they always endeavoured to fortify so as to secure themselves from the hostility of the various native powers. The first place at which the English traded on the Eastern Coast of India was Peddapalli, now Nizampatam, a seaport in the Kistna district. Captain Hippon in the ship "Globe" landed there in 1611. He had at first touched *1611* at Pulicat, but the Dutch Governor refused to allow him to trade. Having left an establishment at Peddapalli with means for carrying on commerce, he sailed to Masulipatam and proceeded similarly. The Masulipatam station became a well established factory and formed the starting point of the English trade on the East Coast; and two years later the English obtained their first treaty of protection from the Moghul Emperor, Jehanghir, at Surat. In 1616 the English at Surat established factories on *1616* the West Coast at Calicut and Cranganore, by permission of the Raja or Zamorin of that country. Subsequently the English established a factory at Pulicat, by the side of one already placed there by the Dutch in 1609. *1609* This was effected under a treaty concluded between King James I and the States General. But in a few years it was necessary to withdraw these factories owing to the jealousy of the Dutch. In 1628, two years after the massacre of the English by the Dutch at Amboyna, and after unsuccessful attempts to escape from the unpleasant proximity of the Dutch at Batavia where the English headquarters in the "South Seas" were for a while situated, a factory was established at Bantam, becoming the Presidency for the factories on the Coromandel Coast. In 1624 from Batavia the *1624* English had tried in vain to settle at Karikal. In 1626 they had established *1626* themselves at Armegam, 40 miles north of Pulicat, where a small fort was built. This was not so well suited for trade as Masulipatam which was more immediately adjacent to the seats of native manufacture. The local Governor however at the latter place exacted such heavy dues that the factory was ordered to be withdrawn. The English goods were placed in the charge of the Dutch at Pulicat; and Brewen and his colleagues sailed secretly for Armegam in a native boat in 1628. However trade proved *1628* less profitable at Armegam than at Masulipatam, and in 1630 two vessels were despatched from Bantam under Henry Sill to re-open trade at the latter place. Nor were the English content with that. A letter from the factors at Masulipatam to Surat of the same year mentions factories at Pattipoli, Viravasaram and Motupalli. Thus opportunities were afforded for an active trade on the Coromandel Coast. The natives there had

brought the art of painting calicos to a high pitch of perfection and these commodities were in demand not only in Europe but also in countries to the eastward—in Burma, Siam, and what were known as the Spice Islands in the Indian Archipelago.

Settlement at Madras

44. Whether owing to the ill-will of the Venkatagiri zamindar whose territory was adjacent or to the fact that the place was not convenient for the inland trade in piece-goods, the Armegam factory did not exist long. Francis Day, who was then a member of the Masulipatam Council and chief of the Armegam factory, and Andrew Cogan seem to have proposed *1639* a removal to the south of the Dutch Settlement, Pulicat, and in 1639 an arrangement was made with the local Nayak called Damarla Venkatadri Nayudu by which the English were to be allowed a settlement at the *1645* place which is now Madras. The factors subsequently in 1645 judged it prudent to obtain a formal grant from the recognized ruler of the country who was then Sriranga Rayal, a descendant of the ancient Vijayanagar kings. After their defeat by the Muhammadan kings of Bijapur and Golconda at the battle of Tallikot in 1564, the broken remnant of royalty had fallen back on their southern possessions ; first to Penukonda, now in the district of Anantapur, and then in 1594 to Chandragiri. The grant of Madras was one of the last acts of the race ; for in 1646 the Qutb Shahi kings of the Deccan expelled him from the country and he became a refugee in Mysore. The term Madras by which the place has always been designated by Europeans is of doubtful origin ; the most generally accepted derivation is from Madrasa or College. The native name Chennaipattanam is generally connected with the name (Chennappa) of Damarla Venkatadri's father, but this is doubted by some authorities.

Fort St. George

45. Without waiting for instructions from the Company, but on the strength of somewhat ambiguous instructions from Surat, Day proceeded to the construction of a fortress which was soon surrounded by a town. The latter he allowed to retain its Indian appellation, but the former he named Fort St. George. The territory granted consisted of the ground on which this fort was built and its immediate vicinity, including what was considered to be an advantageous site for a fort, namely, the small island formed by two branches of the river Cooum. This was 400 yards long by about 100 yards wide and it could be easily rendered secure against the predatory attacks of native horsemen.

The first thirty years of the Madras Settlement *1640–1670*

46. During the half century immediately following the first establishment of the town, the settlers found themselves in many uneasy situations. The advance of the Muhammadan king of Golconda into the peninsula and the occasional inroads of Mahrattas hindered the operations of their trade. The Chandragiri Raja was conquered in 1646 by the Muhammadans ; and Neknam Khan, then known as the Nawab, the officer of the king of Golconda who commanded the country surrounding Madras, was seldom contented with the yearly rent. Presents and fines were exacted and occasionally an embargo was laid upon goods and supplies going to Madras. Nevertheless in 1649 the fort and customs were valued at £6,000. For the first twelve years of its existence it was subordinate to the Presidency of Bantam in Java ; but in 1652 Fort St. George was raised to the rank of a separate Presidency, independent of Bantam, and Aaron Baker became the first Governor. In 1642–1643. the Agent and Council acquainted the Company with the absolute necessity for equipping the fort properly. In 1651 orders having been received from England not to add to the strength of the fort, the agent stated that unless it was strengthened trade could not be extended. Similar representations were made in 1652 on the arrival of news that war between England and Holland was imminent. In 1654, however, the Company ordered that the civil establishment should be reduced to two factors and that the guard should consist only of ten soldiers. The English trade on the Coromandel Coast then declined as a consequence of the inland wars and the superior force of the Dutch by land and sea. In 1657 complaint was also made that the competition of merchant adventurers had enhanced the prices of goods. By a new arrangement in 1658 all the factories on the Coromandel Coast

and in Bengal were made subordinate to Fort St. George. From communications received in 1660 by the Company it appears that the trade at Fort St. George was then beginning to revive. Sir Thomas Chambers had the year before become Governor. In 1661 Sir Edward Winter, an old servant of the Company on the Coast, was appointed Governor. With a high sense of the prerogative of his nation and of the political exigencies attending the Indian stations, he was, nevertheless, not supported by the merchants composing his Council. The stand which he insisted on making against the demands of native powers gave a temporary check to trade ; and this circumstance was used to his disadvantage. In 1665 he was superseded on the ground that he had unduly engaged in private trade. George Foxcroft, a London merchant, thus succeeded Sir Edward Winter and the latter then took a seat as second in the Council. But shortly after, on the pretext that the language of the new Governor was treasonable to the English Crown and endangered the position of the settlement, he seized and imprisoned him and it was only in 1668, when Foxcroft had been detained for over two years as a prisoner, that Winter yielded to a royal mandate sent out by Commissioners. Foxcroft then became agent once more ; but the Company in 1669 sent out Sir William Langhorne with six Commissioners to investigate the whole of this transaction ; and recalled both parties. Mr. Foxcroft was succeeded in 1670 by Sir William Langhorne. In that year the fort was besieged by a local Nayak or a Hindu district officer, but on application to his superior, the Nawab of the Carnatic, the siege was raised. In 1662 a Muhammadan General of Golconda had seized San Thomé. Numbers of Portuguese on that occasion fled from the town, and many took refuge in Fort St. George itself and built houses, the walls of which served as a frail defence of part of the island on which the fort was built.

47. Sir William Langhorne was Governor of Madras from 1670 to January 1678, and in the first year of his administration the Muhammadan ruler of the Carnatic made over to the Company his claim on the customs at Madras for a fixed rent of 1,200 pagodas, or 4,200 rupees, per annum. In 1671 a French fleet arrived in India and in 1672 the French forces captured San Thomé from the Muhammadans who had held possession of it since 1662. Shortly after this the Muhammadan army under the command of a General named Bobba Sahib endeavoured to recover the place. The position of Sir William Langhorne at this juncture was highly critical. It was dangerous to assist the French against Bobba Sahib, and yet the French and English were at that time in alliance. Furthermore a Dutch fleet was cruising off the coast of Coromandel, blockading the French at San Thomé and though it met with no immediate success, there was a likelihood that it would attack Fort St. George. Sir William Langhorne endeavoured to come to definite terms with Bobba Sahib, but overtures were rejected. After a year and a half the French still remained in possession of San Thomé ; and within that time they had established a camp at Triplicane, now the Muhammadan quarter of Madras, and fortified it more strongly than the English had fortified the White Town. In the face of these belligerent powers and as trade was meanwhile at a standstill, Sir William Langhorne and his Council at one time contemplated the advisability of abandoning Madraspatnam altogether, for the proximity of San Thomé, formerly a source of assistance, had now become the cause of continued anxiety. Afterwards, however, more energetic measures were decided upon, and at a consultation held on the 2nd February 1674, it was resolved, the interests of the Company and the lives of all their servants being at stake, to strengthen the fortifications. It may here be mentioned that at this time four Frenchmen from Java were staying in Fort St. George ; and in May 1674 both the Dutch and the Muhammadans peremptorily demanded their removal. To these demands Sir William Langhorne for a long time paid no attention, because of the English alliance with France. The Frenchmen refused to leave the place unless they were permitted to go to San Thomé, and thither the Dutch and Muhammadans would not allow

Madras *1670-1677*

them to proceed. Finally, having been blockaded for eight months on their account, the President sent them with passports and an escort to the distant Bijapur, the Muhammadan kingdom in the Western Deccan. On the 26th August 1674, the French were compelled to surrender San Thomé to the Dutch, which they did on the condition that their garrison should be transported to Europe. At that moment the news arrived from Europe that in the preceding January peace had been concluded between England and Holland. But for this the Dutch would doubtless have followed up the capture of San Thomé by the siege of Fort St. George ; and the fall of the place might well have followed, as the fortifications were still weak, and there were only two hundred and fifty men in garrison. Dr. Fryer, the traveller, visited Madras in 1673 and wrote an interesting description of the place illustrated by a somewhat inaccurate panoramic sketch.

48. Sir William Langhorne was recalled from Madras in 1678 on a charge of bribery, and was succeeded by Streynsham Master, an old servant of the Company who had distinguished himself in a defence of Surat against the Mahrattas and who had a strong faith in the efficacy of armed force as a backing for trade. It was at this period that Sivaji, founder of the Mahratta empire, attained the height of his power. He had assumed all the insignia of a monarch ; and an English deputation from Bombay had been present at his coronation. This ruler suddenly invaded the south of the peninsula in order to secure control of the possessions which his father had acquired there. He set out from his dominions in the Western Ghâts, marched through the Deccan from the north-west to the south-east, and penetrated as far as Tanjore. On his way he passed by Madras. The entries in the consultation books of the Presidency show that presents were sent to him of ordinary necessaries that he needed at a cost of sixty pagodas. There were constant rumours that he was about to attack the English and Dutch settlements. After a while, however, having added Gingee to the Mahratta possessions in the south and having fought several severe battles with the Hindu ruler of Mysore, Sivaji retired to his own country.

1686-1688 49. About this time a more regular system of administration of the Indian stations was instituted, and the different ranks of the Company's servants were definitely settled. Other factories had recently been established to the north-eastward, and the whole of these continued under the authority of the Madras Government until Bengal was separated twenty years later. In 1678 the Governor and Council constituted themselves, according to their earlier practice but in a more formal manner, into a Supreme Court of Judicature, for dealing with Europeans and for hearing appeals. This in 1684 was superseded by an Admiralty Court, presided over by a Judge Advocate, and competent to hear both civil and criminal appeals from the Mayor's Court. In 1726 a charter constituted the President and Council, a court of appeal in civil causes and also a court of Quarter Sessions, which continued until late in the eighteenth century when, after a recorder's court had been for a short while in existence, the Supreme Court was instituted. The latter by fusion with the East India Company's Sadar Court became in 1862 the present High Court. In October 1680 there were difficulties of internal administration at Madras. Resistance to taxation arose among the "painters" of calicoes ; and the whole body left the Company's jurisdiction and went away to San Thomé, threatening to assassinate the native servants of the Company who refused to join them. These men also prevented provisions and goods from entering the town. The Governor and Council thereupon entertained a hundred Portuguese to keep guard over the calico washers, that they might not follow the same example. The wives and children of the mutineers were taken out of their houses in the Black Town and driven into the pagoda ; and it was proclaimed by beat of drum that unless the mutineers delivered themselves up within ten days, all their houses, goods and chattels within the jurisdiction of the Company would be confiscated.

Eight days afterwards the ringleaders were arrested at San Thomé and brought within the Company's territories. These were committed to prison; and on the same evening the remainder came into the town and made their submission. St. Mary's Church in Fort St. George was consecrated in this year.

50. William Gifford who succeeded Master in 1681 soon gave offence to the Company by undue compliance with the desires of the native inhabitants of Madras to escape taxation. The Company had been for a long time anxious to raise a quit-rent from all the householders in Madras, native and European, hoping by so doing to defray the yearly charges for repairs and fortifications. Master had succeeded in raising some such tax, applying it, however, not to repairs or fortifications, but to promoting the sanitation of the Black Town. On his departure the native inhabitants of the Black Town petitioned against the tax and the new Governor abolished it. On the 20th September 1682, the Company wrote to the Governor and Council as follows:—"Our meaning as to the "revenue of the town is that one way or another by Dutch, Portuguese or "Indian methods, it should be brought to defray at least the whole "constant charge of the place, which is essential to all the Governments "in the world. People protected ought, in all parts of the universe, in "some way or other to defray the charge of their protection and preserva-"tion from wrong and violence." This order was frequently repeated, and Mr. Gifford was at length compelled to decide that a small monthly tax should be levied on all the inhabitants. The heads of the castes were sent for, and they were told that if they were not willing to pay this tax they must sell their houses and remove elsewhere. They agreed to pay annually "9 fanams for every great house, 6 fanams for every small house, and 3 fanams for every little round house." The matter nevertheless remained in abeyance till January 1686, when in consequence of peremptory orders from England, Littleton was appointed to collect the tax. A tumult ensued and all the shops were shut. After some demur, the people, seeing the determined attitude of the Council, submitted to their demands. In the same year the Company established what has been called a bank, but the measure was really no more than receiving loans at a fixed rate of interest, a practice which was continued a considerable way into the eighteenth century. At this period special mention is made of interlopers, or private traders whom the Company's agents were instructed to seize where practicable. On the 12th December 1687 the population of the city of Madras, Fort St. George, and the villages within the Company's boundaries, was reported in a despatch to Court to be 300,000 persons. In 1687, Pondicherry was established by the French and in 1690 Fort St. David was built by the English. *1686-1688*

51. Elihu Yale became Governor in July 1687. The early years of his administration are marked by events of importance in the general history of India. The head of the Company in England at this time was Sir Josiah Child who had instituted a new policy of retaliating upon the country powers which interfered with the Company's trade. A force consisting of 10 ships and about 100 European soldiers was sent out to Bengal. In October 1686 hostilities broke out prematurely at Hughly, before all the forces had arrived in Bengal, on account of the seizure of some English soldiers who had gone to the bazaar to buy food in defiance of the Governor's prohibition. The affray became general and finally the English vessels cannonaded the town, the greater part of which was burnt. The Nawab of Bengal was desirous of gaining time in order to assemble troops to punish this insolence, and he accordingly amused the English with pretended negotiations while the English established themselves temporarily at Sutanati, the site of the future Fort William. At Bombay on the other coast Sir John Child, brother of Sir Josiah Child, and Governor, made successful ventures by sea against the Moghul shipping. These successes had no immediate effect. The English at Sutanati withdrew from that place and established themselves on the island of the Injelli at the mouth of the Hughly where they suffered much from **Affairs in connexion with Bengal** *1686-1688*

sickness. The Emperor Aurangzeb now ordered vigorous action against the English. The factories at Masulipatam, Vizagapatam and Surat were all seized. In 1688 Captain Heath arrived in Bengal in charge of a fleet and with orders to capture and occupy Chittagong; consequently negotiations that had been begun again were broken off. All the officers of the Bengal factories including Job Charnock, the Company's agent in Bengal, were embarked on board Captain Heath's ship and, after cannonading Balasor and appearing off Chittagong, the fleet sailed for Madras and there left the civil establishments. At this moment the English held nothing but their two forts of Bombay and Madras, and in such a position of affairs Aurangzeb might have pressed his advantage. Though master on land, he was, however, powerless by sea; and considerations connected with maritime trade and the pilgrimage of Muhammadans to Mecca induced him to come to terms with the English. The factories were restored and Charnock returned to Sutanati and shortly after, in the neighbouring village of Calcutta, he laid the foundations of the future metropolis of India. In 1688 a Mayor and Corporation were established in Madras, forming a court of civil and criminal justice until 1727, and thereafter a court of civil justice only until 1797, when under the presidency of an English recorder it assumed the title of Recorder's Court. The Recorder's Court was merged in the Supreme Court of 1801. The mint which had long been established for gold coinage was in considerable activity and in 1692 permission was obtained to coin rupees. It may be noted that Governor Pitt at a slightly later period asserted that he had coined as much, year by year, as the mint did at London in normal times. Anxiety was caused at this period by the appearance of English pirates on the Coromandel Coast. To this period also belongs the first appearance of the Armenians in Madras. By a contract made with the Directors of the Company in June 1688 they were invested with certain privileges and rights and were thus encouraged to reside within the English settlements.

The Mahrattas

52. The affairs of Madras were at this time materially affected by the Mahrattas. The Carnatic was politically divided into a northern and a southern region, which may be distinguished as the Moghul Carnatic and Mahratta Carnatic. The Moghul Carnatic had been previously a province of the independent Muhammadan State of Golconda and had recently owing to the conquests of Aurangzeb become a province directly under the Moghul; and this included the English settlement at Madras. The Mahratta Carnatic comprised the southern region which had been conquered by Sivaji, and included the French settlement at Pondicherry. The frontier between Moghul and Mahratta dominion was formed by the celebrated fortress Gingee, which for many ages had been regarded as the strongest military post in the Carnatic. In 1677 it had been captured by Sivaji. In 1689, it was in the possession of his son Ramaraja and was the frontier fortress of the Mahrattas against the Moghuls. In 1690 Zulfikhar Khan, commanding the Moghul army in the Carnatic, laid siege to Gingee. This general, one of the most distinguished persons of his time, was not only in command of the Moghul army before Gingee, but also exercised a powerful influence at court. On a rebellion breaking out in the Moghul army, Yale supplied Zulfikhar Khan with ammunition and rendered other services; as a reward for which he obtained a farman from the Moghul general, confirming the English Company in the possession of all their settlements in Golconda and Gingee territory. In 1691 the Mahrattas were still masters of Gingee, Ramaraja controlling the whole country from Gingee to the river Coleroon; and so firmly was his power established that the English, when requiring the site of Fort St. David, had found it necessary to purchase it from him. In 1692 Zulfikhar Khan was still besieging Gingee, being accompanied by the youngest son of the Emperor Aurangzeb, named Kambaksh. In December 1692 the Moghuls were defeated by the Mahrattas and many of the Moghul officers fled to Madras in disguise. This year a farman was obtained from Zulfikhar Khan, granting Egmore, Purasavakam and Tandur to the Company rent-free. The villages were afterwards demanded by the Poonamallee Nayak, who

alleged that the Nawab had granted them to himself, and the Agency experienced some difficulty in obtaining possession. Finally however, in March 1694, permission was received from Zulfikhar Khan to take possession of these places. In January 1693 an English soldier in the service of Zulfikhar Khan returned to Madras bringing news that Kambaksh had tried to escape to the Mahrattas, and had been seized and imprisoned by Zulfikhar Khan ; and that the camp of the latter having been reduced to starvation from want of provisions, the Moghuls had retired to Wandiwash, leaving most of their baggage at the discretion of the Mahrattas. In 1696 Mahrattas were found to be increasing their forces at Gingee, and the settlement at Fort St. David was warned to keep on good terms if possible with Ramaraja and his officers. Later in the same year, Zulfikhar Khan sent to Madras to borrow a hundred thousand pagodas, equivalent to about forty thousand pounds sterling. Nathaniel Higginson, who was Governor of Madras, sent a present, but declined to lend the money ; and there was some anticipation that Zulfikhar Khan would make reprisal son the town. Eventually in 1697 Zulfikhar Khan obtained reinforcements and defeated the Mahrattas near Tanjore, and in 1698 he captured Gingee by means of bribery. This general had already granted farmans, confirming the English in the possession of their territorial settlements ; and he now procured them corresponding farmans from the Vizier in the Emperor's name. For this a consideration was paid of ten thousand pagodas or about four thousand pounds sterling.

53. To return to matters more immediately concerning the settlement, in 1689 war had broken out between France and Holland, and in August 1690 the combined Dutch and English fleets engaged in an indecisive action with the French off Madras. The next year Sir John Goldsborough was sent out to Madras with authority to decide certain disputes between Elihu Yale and his Council. Directions were given to improve the revenue of Madras by increasing the quit-rents, and by imposing a duty on licences for public houses. The town was to be extended, and a quarter was to be assigned to the Armenians. It was also ordered that the members of the Court of Aldermen should be of different castes, namely " one Armenian, one or two Hebrews, one or two Portuguese, one or two Gentoos, and one Moor or Mussalman." The factories at Kunimedu and Cuddalore were withdrawn. The military establishment at Fort St. George was also retrenched. As a result of the commission at Madras, Nathaniel Higginson became Governor in 1692. **Madras** *1689-1692*

54. In August 1693 the Dutch appeared before Pondicherry with a large fleet, and captured it after a siege of twelve days. In 1694 there was a report of a French equipment of nine ships for India, and it was ordered that additional precautions should be taken at Fort St. George and Fort St. David. Meanwhile the depredations of pirates increased, and trade on the Coromandel coast was much depressed. In 1697 a petty attack was made on the Company's factory at Anjengo on the Travancore coast. In 1694 the Company had obtained permission from the native queen to fortify Anjengo, but in November 1697 the same ruler sent a force to eject the English as pirates. The native force was repulsed in two engagements, without loss. About the same time Salim Khan, brother of Daud Khan, hereafter to be mentioned, made two attempts upon Cuddalore, both of which were defeated. By the treaty of Ryswick in September 1697 Pondicherry was restored by the Dutch to France. *1693-1697*

55. In 1700 Bengal was made independent of Fort St. George. In 1698 Thomas Pitt, grandfather of the celebrated Earl of Chatham, had succeeded Higginson as Governor of Madras. Disputes now arose between the old or London Company, the new or English Company and the Scotch East India Company originally embodied by King James I in 1617. These led to depression of trade, and the circumstances finally brought about an amalgamation of all traders to India, under the *1700*

appellation of the "United East India Company," established under Queen Anne's Charter in 1702.

1701 56. In 1701 Zulfikhar Khan was succeeded by Daud Khan as Nawab or military commandant of the Carnatic. The English sent this officer letters and presents. A present valued at seventeen hundred pagodas was given in public, and another of three thousand rupees was given in private. The Nawab however sent back the presents, desiring to receive ten thousand pagodas as his predecessor had done, and he threatened to destroy Madras and establish San Thomé in its place. Pitt refused to pay the money, landed men from the merchant ships, increased the train bands and raised a force of Portuguese. Daud Khan blockaded Madras for three months, but finally accepted the present. In 1703 renewed attempts were made by the Nayak of Poonamallee to obtain possession of the Company's outlying villages of Egmore, Purasawakam, and Triplicane, which were frustrated by the decided action of the Government. Up to 1703, gunpowder formed one of the articles supplied from England; but about this period the manufacture of it was so much improved at Madras, as to preclude the necessity of importing it for some time. The practice, however, seems to have begun again, for in 1749 the Company wrote that henceforward gunpowder was to be supplied from Bombay instead of from England. In 1707 occurred serious disputes between the right and left hand castes or factions, which resulted in the retirement of the former to San Thomé, but the matter was finally arranged. Pitt's administration was distinguished by the establishment of a closer relationship with the Court at Delhi. Aurangzeb died in 1707, and the event was followed by a war between his sons. The elder son gained the victory, but being apprehensive lest his rival should find a refuge in Madras, and make his escape to Persia, he sent a conciliatory letter to Pitt by an influential official. Pitt, while making a suitable response, asked for a farman confirming all the privileges which had been granted by Aurangzeb, and the request was granted.

1707–1739 57. Madras was at this time the most important factory possessed by the Company in India. Other factories on the Coromandel coast were Fort St. David, Cuddalore, Masulipatam, Porto Novo, Madapollam and Vizagapatam. On the Western coast the Company possessed the island of Bombay, with subordinate factories at Surat, Broach, Ahmadabad, Suwali, Anjengo, Karwar, Tellicherry and Calicut. In Bengal they had Fort William, and Sutanati or Calcutta, with factories at Patna, Malda, Dacca, Balasor, Rajmahal and Kasimbazar. The English paid their yearly rent of twelve hundred pagodas to the Nawab of the Carnatic, who was subordinate to the *Subadar* of the Deccan, to whom he paid a yearly tribute. In 1738–39, the power of the Moghul King or Padshah received a severe blow from the Persian invasion under Nadir Shah, and from that date the province began once more to grow independent of the Court at Delhi. The *Subadar* of the Deccan at this period is best known by his title of Nizam-ul-mulk, the "Regulator of the State." He had served in the armies of Aurangzeb and had filled important posts in the Court at Delhi, had been appointed to the Government of all the Moghul conquests in the Deccan, and had engaged in frequent wars against the Mahrattas of Poona to the west and those of Berar to the northward. His dominion extended from the river Gōdāvari southward to the river Kistna, and was bounded on the west by the Mahrattas of Poona, on the north by the Mahrattas of Berar and on the east by the Bay of Bengal. The province of the Nawab of the Carnatic lay to the south of the Nizam's dominions. It extended from the river Kistna southwards to the river Coleroon being bounded on the north by the Nizam's territory, upon the west by the Mysore country, on the south by the Hindu kingdoms of Trichinopoly and Tanjore and on the east by the Bay of Bengal.

58. The period from the Governorship of Pitt to that of Nicholas Morse which began in 1744 is not distinguished by any events of special interest.

59. The first establishment of the French in India dates as far back as 1668. From 1503 to that period, the French had made various attempts to establish trade relations with the East Indies, but without success. The first expedition was driven to Brazil ; the next reached Sumatra but lost nearly all its men by sickness ; and it was not till 1601 that they seem to have tried to reach India itself. Two ships in that year were fitted out at St. Malo, under the command of Captain La Bardeliére ; but one at least was lost off the Maldives before reaching its destination. In 1604 Henry IV incorporated the first French East India Company with a charter for fifteen years. This also achieved little. Colbert did not however allow himself to be discouraged by the fruitless results of efforts prolonged for more than a century and a half. In 1664 he re-established on a better and more extensive basis the East India Company which Cardinal Richelieu had created twenty-two years before. The monopoly of the trade for fifty years was accorded to this Company, which soon collected funds to the amount of 15 millions of francs. At first it displayed great activity. Two successive expeditions were undertaken for the purpose of renewing the attempts at colonization already made in Madagascar ; but these expeditions having failed, the Company renounced the projects which they had formed for Madagascar, and direct commerce with India was again undertaken and continued with spirit. In 1667 a merchant of French origin named Caron, an active and experienced man, became chief of the East India Company. He first established a factory at Surat ; but though this city was flourishing and well situated, the Moghul Government was too powerful to permit his establishing such a settlement as he had planned. He designed a settlement at Trincomali, but the Dutch, having got wind of his intentions, occupied it before he could get there, and all he could do was to occupy two small islands off the coast. At this time Caron was recalled to Europe, but De la Haye, the Commander of a French squadron of five ships, in 1672 took San Thomé, at that time a possession of the King of Golconda ; but in 1674 the Dutch succeeded in reconquering the place. This event would have effected the ruin of the Company, whose affairs had been for some time in a distressed condition, if one of its agents named Francois Martin had not collected the wrecks of the colonies of Ceylon and St. Thomé, composed of 60 Frenchmen, to people the small town of Pondicherry, which as well as the surrounding territory he had purchased in 1674 with the funds of the Company from the Governor of Gingee, then superintending all Sivaji's conquests in the Carnatic. The country was, however, nominally subject to the Deccani King of Bijapur. Martin fortified Pondicherry, and by his superior administration the small colony prospered and soon gave great hopes of success. The Dutch attacked it in 1693. Martin, after defending it with great courage, was compelled to capitulate, and on the 5th September 1693, the town was given up. By the treaty of Ryswick, Pondicherry was restored to the French in 1697, who received it from the hands of the Dutch in a much better state than when they yielded it to them. In 1699 this town became the capital of the French possessions in India. The able administration of Martin succeeded in making it the centre of a rich commerce, and one of the most important towns which the Europeans possessed in Asia. A number of Frenchmen soon spread over the Indian continent and formed new factories. Chandanagar in Bengal was granted by Aurangzeb to the French East India Company in 1688. In 1727 this Company obtained the cession of Mahē. In 1739 it purchased Karikal from the King of Tanjore. And in 1752 Yanam and Masulipatam, which the French had two years before seized, were definitely ceded by the Nizam, together with a large extent of territory. Two Governors-General of the French establishments in India, Dumas and Dupleix, contributed greatly from 1735 to 1754 to the prosperity of these possessions. Amongst other advantageous concessions, Dumas obtained from the great Moghul the privilege of coining money at Pondicherry, which gave to the Company a yearly income of

The French in India *1668-1742*

about 500,000 livres. Dupleix, appointed in 1730 Governor of Chandanagar, succeeded in ten years in making that place one of great commercial importance. The town of Pondicherry, the government of which was confided to the same officer in 1740, was equally indebted to him. It was under his government that the French possessions and power in the East Indies attained their greatest extent.

Wars between the French and the English *1744–1749*

60. Meanwhile and until the end of the first half of the eighteenth century the English had carried on their trading operations tolerably unmolested in the midst of the continual wars between the Muhammadan and Mahratta conquerors of the old southern Hindu powers. The affairs of the French and English between the breaking out of the first war in 1744 and the final overthrow of Lally at Pondicherry by Coote in 1761, sixteen memorable years for both parties, cannot be related here in detail. The European war broke out in 1744. Before that, however,—indeed as early as 1741—the French ministry sent an armament to India under Labourdonnais, who, already distinguished by his talents and by his successful government of Bourbon and Mauritius, was also intimately acquainted with the politics and resources of India. He was to watch the progress of events in Europe, and be ready to act against the English in case war should be declared. These preparations were known to the English ministry, who in order to check them sent a squadron of four ships to India under Commodore Barnet. That officer for some time cruised successfully in the Straits of Sunda, and after the declaration of war proceeded to the Coromandel coast. The French Governor at Pondicherry was then Dupleix ; the English Governor at Madras was Nicholas Morse. The English troops in the Presidency numbered only 600. On the 4th September Labourdonnais attacked Madras. On the 10th it capitulated, and the generosity of Labourdonnais not being equalled by that of Dupleix, the English Governor and merchants were sent as prisoners to Pondicherry. John Hinde at Cuddalore assumed charge of the English settlements. Cuddalore itself was twice attacked by the French, and twice escaped. In 1747 reinforcements having arrived from England the English in turn besieged Pondicherry, under Admiral Boscawen by sea, and Major Stringer Lawrence by land. Ensign Clive distinguished himself at this siege, which however was raised. The peace of Aix-la-Chapelle was concluded in 1748, and the arrangements consequent on it were carried out in India at the end of 1749, when Madras was restored to the English. The French, during the four years they occupied it, had considerably improved the fort, by enlarging and strengthening the bastions and batteries. They had also demolished that part of the Black Town immediately adjoining the north wall of the fort, and formed an excellent glacis. Another glacis had also been cleared to the south. The defences, however, were considered far weaker than those at Fort St. David.

1749-1752

61. The European war being thus ended the forces of the two powers were under the necessity of finding occupation and profit in the various wars between the native princes. It was inevitable that they should take opposite sides in the quarrels and disputed successions that now arose. The campaigns of the Nawabs Zulfikhar Khan and Daud Khan in the Carnatic, during the reign of Aurangzeb, have already been noticed. On leaving the Carnatic under orders from the Emperor the latter had appointed Sadat Ullah as his deputy, who governed the provinces from 1710 to his death in 1732 with much moderation and ability. On his demise his nephew Dost Ali Khan assumed the government of the Carnatic, as it were independently ; for it does not appear that the Emperor of Delhi, the nominal superior, or Nizam-ul-mulk of Hyderabad, the real superior, were consulted at all. Dost Ali had one son, Safdar Ali ; and had married two daughters, one to Murtaza Ali Khan, the other to Chanda Sahib. At this juncture the Mahrattas under Raghuji Bhonsla invaded the Carnatic, and in an action with them Dost Ali was killed. Safdar Ali now made terms with Raghuji, and, on condition of the payment of one hundred lakhs of rupees, was recognized as Nawab of the Carnatic. But

meanwhile Safdar's brother-in-law Chanda Sahib, on pretext of assisting the widowed Rani, had obtained possession of Trichinopoly ; and Safdar was too weak to attack him. Raghuji therefore returned to the Carnatic after his visit to Satara in 1741 and besieged Trichinopoly, when Chanda Sahib was obliged to capitulate, and was kept at Satara until he paid the heavy ransom demanded of him. He had however placed his wife and family in the French Settlement of Pondicherry, under the charge of Dupleix the Governor ; and this act led subsequently to strange and important events. A year after his assumption of the Government, Safdar Ali was assassinated by his other brother-in-law, Murtaza Ali, who was proclaimed Nawab ; but the family of Safdar Ali had obtained protection in the English fort at Madras and his son, a minor, was proclaimed successor to his father. To put an end to these convulsions Nizam-ul-mulk marched from Hyderabad in 1743 at the head of an overwhelming force, and, setting aside the claims of the pretenders, Chanda Sahib and Murtaza Ali, appointed Anwar-ud-din to the Government of the province during the minority of the son of Safdar Ali. The young Nawab was, however, assassinated a few years later, and Anwar-ud-din became Nawab of the Carnatic, and was thus the founder of the family which still exists. These remarks will explain the relations which existed between Anwar-ud-din and Chanda Sahib. The former had attached himself to the English, the latter to the French. The former, though short-lived, transmitted his attachment to the English to his son, Muhammad Ali. The last named ruler was indeed called "the Company's Nawab." Again when Nizam-ul-mulk died in 1748 he was succeeded by his son Nazir Jang; but the title was disputed by Musafir Jang, the son of a deceased elder brother of Nazir Jang. In this case also the direct claimant looked to the English, and his opponent looked to the French. The Mahrattas at this time still held supreme power in Tanjore and the adjacent country. The English first in 1749 assisted a claimant to the Mahratta throne of Tanjore against a relative and were rewarded for ceasing to support this claimant by the cession of the town of Devakottai. Then in the same year the French took up the cause of Chanda Sahib, in alliance with Musafir Jang; the double aim being to secure for these claimants the Nawabship of Arcot and the Subahdari of Hyderabad. Opposed to them were Anwar-ud-din, the then Nawab, and Nazir Jang, the then Nizam, who had just succeeded. Musafir Jang succeeded in securing the throne of the Nizam, and the triumph of the French under Dupleix appeared complete until Clive came upon the scene and to a large extent changed the course of the war. Clive seized Arcot, the capital of the Carnatic, on the 30th August 1751, while Chanda Sahib and the French were besieging Muhammad Ali, the son of Anwar-ud-din recently killed in action, in Trichinopoly. Clive himself was besieged in turn ; but he repulsed all attacks and followed up his success by the victory of Arni, which virtually placed the Carnatic once more under the ally of the English, Muhammad Ali, although the siege of Trichinopoly was not formally raised until the French detachment which had retreated to Srīrangam surrendered to Major Lawrence in June 1752. Chanda Sahib surrendered to the Tanjore general who had him executed. Musafir Jang retained the Nizamship under French protection, but for a brief while ; he was killed in action with some feudatories, and was succeeded by Salabat Jang, a son of Nizam-ul-mulk, also placed on the throne by the French.

62. A quarrel next broke out between Muhammad Ali and Nanjaraj, the minister of the Raja of Mysore. The assistance of the latter in the recent war had been procured by the Nawab on a promise to cede Trichinopoly if he were victorious ; but when he had attained the object of his wishes, he declined to fulfil his agreement. Nanjaraj then joined the French and, though the English at first hesitated to assist the Nawab in such circumstances, the conduct of Nanjaraj in other matters left them no alternative but to treat him as an enemy. A succession of engagements took place, chiefly in the immediate vicinity of Trichinopoly, in which the English were almost uniformly successful, but their lack of *1752-1754*

cavalry prevented their gaining a decisive victory. The recall of Dupleix on the 14th October 1754 led to a cessation of hostilities, but the English continued to aid the Nawab of the Carnatic in the internal management of his dominions, the Nizam, Salabat Jang, receiving similar assistance from French under Bussy.

1757-1768

63. The theatre of action was then for some time transferred to Bengal, where Clive took command of the English army; but hostilities recommenced in Southern India in 1757 as soon as it was known that war had again broken out in Europe between the French and the English. The French took advantage of the English forces being dispersed in various expeditions, and made an unsuccessful attack on Trichinopoly, while another detachment succeeded in gaining possession of Vizagapatam. In 1758 a French fleet appeared off Fort St. David, and that fort fell on the 2nd June. Devakottai was next reduced, and the French commander Lally made a triumphal entry into Pondicherry. But here his success ended. An expedition against Tanjore resulted in complete failure. In December, however, he besieged Madras itself. On the 9th December Colonel Lawrence who commanded the English withdrew all his outposts to the Choultry Plain and on the 12th into the Fort. The attempts made by the English forces in the interior to assist Madras during this siege were ineffectual. Captain Preston, however, with Muhammad Yusuf, a Muhammadan partizan of the British, made an attack on the French quarters at San Thomé in January. Owing to the cowardice of the division under Muhammad Yusuf, though he personally made great exertions, this venture failed, and Preston fell back on Arcot to raise fresh levies. Major Caillaud also came up in February with a detachment from the south, accompanied by some of the Nawab's troops; and on the 7th a sharp engagement took place at the Mount, the French having unsuccessfully attacked Caillaud's position. Caillaud, however, was obliged to fall back on Chingleput. This siege was raised soon after, when an English fleet appeared in the roads. In the meantime the English arms under Colonel Forde were progressing satisfactorily in the Northern Circars, whither Clive had sent him with a detachment in order to divert the French, if possible, from their attack upon Madras. His success, culminating in the capture of Masulipatam on the 7th April, destroyed the French influence with the Nizam, and a tract of territory around Masulipatam extending eighty miles along the coast and twenty miles inland was ceded by him to the English. The operations in the south were of a minor nature until 22nd January 1760, when the French under Lally were completely defeated at Wandiwash, near Arcot, by Colonel Coote, who had arrived with reinforcements from England. This was followed by the capture within a fortnight of Gingee and Arcot. Minor forts fell in succession, and by May the English were in a position to lay siege to Pondicherry. Lally then had recourse to the services of Haidar Ali, an adventurer who subsequently usurped supreme power in Mysore, but who at that time merely held high military command under the Raja. An English detachment, sent to meet the Mysoreans, was defeated and the situation of the English might have become critical had not affairs at home recalled the Mysore troops to their own country. Deprived of the aid of the Mysoreans the French cause soon became hopeless and on the 16th January 1761 Pondicherry surrendered. With this event the French power in the Carnatic virtually ended. By the peace of Paris, in 1763, Pondicherry was restored to the French, but with diminished territory. Mahé, Karaikal, Chandanagar, and other factories in Bengal were in like manner restored, but they were not occupied till 1765.

The First Mysore War
1756-1769

64. So far as the English were concerned there were no more military operations in Southern India until 1766, beyond granting such aid as was from time to time necessary to enable the Nawab of the Carnatic to repress insurrections. Negotiations were carried on with the Nizam for the cession of the Northern Circars, but with no very satisfactory results; and in 1765 sanads transferring these tracts to the Company were obtained

direct from the Emperor at Delhi, whose paramount authority was recognized by the Nizam. The Madras Government, however, hesitated to avail themselves of the powers thus assigned to them except with the consent of the Nizam; and in 1766, although sending a body of troops to secure their possession, they entered into a treaty with the Nizam, agreeing to pay tribute for the Circars and to defend him against his enemies. In the meantime the Mysore adventurer, Haidar Ali, had succeeded, not only in obtaining supreme power in that province, but also in extending his dominions on all sides; and the English were speedily called on under the treaty to assist the Nizam and the Mahratta in checking his encroachments on their territories. No sooner, however, had operations commenced than Haidar Ali, by judicious expenditure of treasure, bought off the Mahratta and even induced the Nizam to desert his allies and join him in a descent upon the Carnatic. Colonel Smith, who commanded the English troops, finding himself thus opposed to a force very much larger than his own, commenced a retreat, followed by the allies, who overtook him at Chengama. The English repulsed their attack, but were compelled to continue their retreat to Tiruvannāmalai. On being attacked at that place, they obtained a decisive victory, the troops of Haidar and the Nizam retreating in the utmost confusion, while bands of marauding horse, who had been plundering the country up to the very gate of Madras under the command of Haidar's son, Tipu, a boy of seventeen, considered their situation to be no longer secure, and drew off to re-join the rest of the army. Colonel Smith, however, was too weak to follow up his victory, and withdrew his troops into cantonments for the rains which were now at hand. Haidar at once took advantage of this inaction to reduce a few unimportant fortresses, but his progress was checked at the hill fort of Ambur, where Captain Calvert, with a garrison of five hundred sepoys and fifteen Europeans, defied the utmost efforts of Haidar's armies for nearly a month, until he was relieved by Colonel Smith on the 7th December 1767. Haidar then drew off and after a few skirmishes retired above the ghâts, having learned that an expedition from Bombay had captured his fleet in the harbours of Kanara and commenced hostile operations in his territories on the Western coast. Risking an invasion from the east, Haidar hurried over to meet what to him seemed to be the more imminent danger, and appeared suddenly before Mangalore in such force as to compel the re-embarkation of the expedition. In the meantime, though very imperfectly informed of Haidar's actual movements, the Madras Government resolved to commence offensive operation; and one body of troops under Colonel Wood proceeded to reduce the fortresses on the south-eastern slopes of the Ghâts, while another entered Mysore itself under Colonel Smith. The movements of both detachments were at first uniformly successful, but as soon as they had united in August 1768, with a view to attacking Bangalore, Haidar returned from the West coast and made an attack on the camp of the Mahratta contingent; a movement which, though unsuccessful, was sufficient to show that it would not be possible to reduce Bangalore unless a decisive victory could be first obtained over Haidar in the field. Various marches and counter-marches were undertaken with this object, but in vain; and after re-conquering a number of the fortified places on the tableland, Haidar descended into the low lands by passes unknown to the English, and retook the fortresses in Coimbatore, the Baramahal, and Salem, which in almost all cases had been left inadequately supplied with troops. He did not, however, risk an engagement in the field with Colonel Smith; and a treaty was concluded on the 4th April 1769 on the basis of a mutual restitution of conquests with the exception of Karur, which was ceded to Haidar on the ground of its being an ancient dependency of Mysore.

The Second Mysore War *1780–1784*

65. From the date of this treaty until the year 1780 the military operations in the south of India, other than the usual duties of assisting the Nawab of the Carnatic to keep the peace in his own dominions and in his disputes with the Tanjore Raja, consisted in the

capture of Pondicherry from the French in 1778 and the reduction of the French settlement of Mahē on the West coast in 1779. These events were a consequence of the renewed war in Europe between France and England. Sir Hector Munro was the English commander; and the French Governor was de Bellcombe, who made an obstinate defence. The garrison consisted of 3,000 men of whom 900 were Europeans; the besieging army of 10,500 men of whom 1,500 were Europeans. The war which broke out again with Haidar in 1780 arose out of the fact that the Nawab of the Carnatic failed to furnish the supplies necessary to enable the English to fulfil the stipulation of the treaty of 1769. Haidar succeeded in forming an alliance with the Nizam and the Mahrattas, and descended on the plains of the Carnatic in July 1780 burning crops and devastating villages, so that a cordon of blackened desert was formed around Madras, commencing at the lake of Pulicat, extending some fifty miles inland, and terminating a little to the north of Pondicherry. Sir Hector Munro proceeded to Conjeeveram and directed Colonel Baillie to join him there with troops from the north. Haidar endeavoured to prevent the junction; and Sir Hector Munro, seeing that Colonel Baillie was in danger, sent a detachment under Colonel Fletcher to his aid, which successfully eluded the enemy and joined Colonel Baillie on the 9th September, only to be included however in the general massacre which took place when Colonel Baillie's force was attacked by overwhelming numbers on the following day. Sir Hector Munro considered Conjeeveram no longer tenable when he heard the news of this disaster, and commenced a retreat to Madras, which he reached on the 14th September, leaving the field open to Haidar. On receipt of the intelligence at Calcutta the Governor-General, Warren Hastings, suspended John Whitehill, the Governor of Madras, and despatched Sir Eyre Coote with reinforcements. The latter arrived on the 1st November 1780, but was unable to take the field until the 17th January 1781. On the 19th he relieved Chingleput, and on the 21st retook Karunguzhi which had the effect of raising the siege of Wandiwash, a place defended with great distinction by Lieutenant Flint. Hearing of the arrival of a French fleet off Pondicherry, Sir Eyre Coote proceeded to that place, but, finding that the fleet had brought no land forces, he turned his attention to the protection of Cuddalore. Haidar had followed him down the coast, but moved off when the English General offered battle. Thus hampered, the troops remained almost inactive until the 18th June, when an ineffectual attempt was made to capture Chidambaram. The news of this failure emboldened Haidar to make a decisive attempt to annihilate the English army, and he accordingly advanced and took up a position close to Sir Eyre Coote's camp at Porto Novo, a small town on the coast about 14 miles south of Cuddalore. The battle commenced early on the morning of the 1st July 1781, an English fleet lying close in shore in order to take on board the remnant of the army in the event of its being defeated in this encounter with an enemy eight times as numerous as itself. The battle was long and obstinate, but by four o'clock in the afternoon the enemy were in precipitate retreat. The want of cavalry rendered Sir Eyre Coote unable to take full advantage of the victory which he had gained, but he succeeded in again relieving Wandiwash on the 18th July; after which he proceeded northwards and joined a detachment from Bengal at Pulicat, having eluded the force sent to intercept him by adopting a line of march hitherto supposed to be impassable for troops. Thus reinforced, he marched against the fortress of Tiruppasur and procured its surrender on the 22nd August, shortly before Haidar's relieving army appeared on the field. A general action took place on the 27th, but with no very decisive result, though the English kept possession of the field. A month later, on the 27th of September, the English commander surprised the enemy near Sholinghur and gained such a victory as put him in a position to throw provisions into Vellore, which had been besieged from the commencement of the war. In November the English army retired for the rainy season to Madras, where it remained until the following

January, when it had once more to advance to the relief of Vellore. Haidar then turned his attention to Cuddalore, and succeeded in reducing it with the assistance of a French contingent which had landed at Porto Novo. The reduction of Perumakovil by Haidar followed, but Sir Eyre Coote once more arrived in time to save Wandiwash. In the meantime war had broken out with the Dutch as well as with the French, and the Dutch settlements of Sadras, Pulicat and Negapatam had been captured. A portion of the force employed for the reduction of the latter place was subsequently detached under Colonel Brathwaite to operate in Tanjore. Deceived by spies, the small force was suddenly surrounded by superior numbers under Haidar's son, Tipu, and only a small remnant escaped with their lives. To counterbalance this, a rebellion had broken out in Malabar and a small force of English sent to their aid gained a considerable victory at Tellicherry, which necessitated the immediate despatch of Tipu to the West coast; and Haidar Ali, considering himself overmatched by Sir Eyre Coote, determined to quit the Coromandel coast. The English commander then returned with his army to Madras, and General Stuart assumed the command in his place. The English force on the West Coast was scarcely strong enough successfully to oppose that brought against it, but the news of the death of Haidar at Chittoor on the 7th December 1782 led to Tipu's speedy return to the headquarters of the principal army, thereby leaving the field open to the English, who were shortly afterwards reinforced by a considerable number of troops from Bombay under General Matthews. Several places on the coast fell in rapid succession, and eventually the English penetrated to Bednor above the Ghâts. Here, however, their success ended, Tipu returning and compelling the surrender of the place on the 3rd May. After this he marched to the siege of Mangalore, where a small fort was occupied by Colonel Campbell. The garrison of this place was insignificant and the material defences of the place equally so, but Tipu was unable to take it by assault and his large army remained for many months practically inactive, while his French allies under Bussy were being besieged in Cuddalore. On receipt of the news of the conclusion of peace between France and England, an armistice was agreed upon under which Tipu was bound to provision the garrison at Mangalore. He, however, supplied provisions which were unfit for consumption, and the garrison, broken down by famine and sickness, capitulated on the 30th January 1784, the health of the commander being so undermined that he expired on the 23rd March following. After much delay, peace was ultimately concluded on the 10th March on the basis of a mutual restoration of conquests. During this war many of the English prisoners, including General Matthews, were put to death by Tipu.

The Third and Fourth Mysore Wars *1791–1799*

66. After the conclusion of peace with the English, Tipu seized about thirty thousand of the Christians of Kanara, forcibly converted them to Muhammadanism, and deported them to the country above the Ghâts. Subsequently, rebellions of the Nayars of Malabar on account of a similar exercise of religious zeal in that portion of his territory led to expeditions for their suppression; and many of the Nayars having taken refuge in Travancore, Tipu resolved to invade that country in their pursuit notwithstanding an intimation that such a proceeding would involve him in another war with the English. His first attempt to enter Travancore ended in failure. A second was more successful, and the country was overrun; but, on his return to Coimbatore, Tipu found an English army in the field at Trichinopoly under the command of General Medows, the Governor of Madras, who had also entered into alliances with the Mahrattas and the Nizam. Tipu at first withdrew to Seringapatam, which he had established as the capital of his dominions; and the English met with little opposition in the reduction of the various forts along the south-eastern slopes of the Ghâts until the 7th September, when their army was attacked by a force commanded by Tipu in person, which had descended by the Gejalhatti pass. The attack was repulsed, but General Medow's efforts to bring on a general action were evaded by Tipu; and nothing but

indecisive skirmishes took place, until the Governor-General, Lord Cornwallis, took the field in person, and, assuming command on the 29th January 1791, at once commenced preparations for a march upon Bangalore, concentrating his army at Vellore. Tipu hastened to intercept his advance which he expected would be made by the passes near Ambur ; but the demonstration in that direction was a feint, and the tableland was reached by the more northerly pass of Mugli without a shot being fired. The pettah or town of Bangalore fell early in March, and on the night of the 20th the fort was taken by assault after a severe contest of a little over an hour. While these operations were going on in Mysore, Colonel Hartly from the Madras side had defeated the Sultan's troops near Calicut ; and General Abercrombie, Governor of Bombay, had landed at Tellicherry with a considerable force, and reduced Cannanore without encountering much opposition. But little difficulty was met with in the operations in that neighbourhood and within a very short time the whole of Malabar was in the occupation of the English. Operations on a smaller scale were conducted in the north in concert with the Mahrattas and the Nizam, the latter having also despatched a body of about ten thousand horse to join Lord Cornwallis' army.

67. On the 4th of May the English army left Bangalore to march against Seringapatam ; but the route was so difficult, the means of transport were so limited, and the devastation of the country by Tipu had been so well carried out, that, notwithstanding a successful engagement at Arakere only nine miles from Seringapatam, Lord Cornwallis was compelled to abandon his plan of operations for the time and retire to the vicinity of Bangalore, where he occupied himself for some time in reducing the hill forts. The Nizam's troops and the Mahrattas having marched from the north and reinforced his army with both men and supplies, Lord Cornwallis again appeared before the walls of Seringapatam on the 5th February 1792. On the night of the 6th, the outlying encampment and redoubts were carried and the city closely invested on two sides. Preparations were made for the vigorous conduct of the siege, and on the 16th the army was joined by that of General Abercrombie from Malabar. A few days previously Tipu had made overtures for peace ; but the negotiations did not lead to a cessation of preparations for the siege, and the fall of Seringapatam was close at hand when on the 24th February orders were issued for the discontinuance of all hostilities. Peace had been agreed upon on the basis of a cession to the allies of one-half of the dominions of which Tipu was in possession before the war, the payment of three crores and thirty lakhs of rupees, and the restitution of all prisoners including those detained from the time of Haidar. Under this treaty the English came into possession of the Baramahal, Dindigul, Malabar and Coorg ; the latter being restored to the Raja who had rendered essential aid to the English in the course of the war.

68. Though thus much weakened, Tipu was not rendered completely powerless. He lost no time in commencing a series of intrigues with the view of engaging to his side those who had been the allies of the English and even despatched an embassy to Paris asking for the assistance of the French. His overtures being rejected by Louis XVI he renewed them after the Revolution had broken out, and a contingent of ninety-nine men from Mauritius landed at Mangalore in 1798. The aid thus received was insignificant, but the object in applying for it was manifest ; and the Governor-General, Lord Mornington, resolved to act at once rather than wait till Tipu had matured his plans. Instructions were despatched for the immediate adoption of such measures as were necessary to place the Madras army on a satisfactory footing, and an alliance was entered into with the Nizam. The object of the Governor-General was to obtain possession of the maritime territory still under Tipu, and thus preclude him from communication with the French ; and before commencing the war an opportunity was afforded him of averting it by timely concession. But the efforts at negotiation were ineffectual, and offensive operations were determined on. The army of

the Carnatic was placed under the command of General Harris, while another force from Malabar under General Stuart ascended into Coorg early in March 1799. Tipu directed his first efforts against this latter army, but was beaten at Siddheswar near Periyapatna, and in the meantime General Harris and the Nizam's troops crossed the Mysore frontier. Tipu turned to meet them, and was defeated with severe loss in a general action at Malavalli on the 27th March. He then retired to Seringapatam, and the allies advanced to the siege, which lasted for a month before a practicable breach was made. The assault commenced at one o'clock on the 4th May, and before evening Tipu was dead, and the whole town was in the possession of the English. The dynasty of Haidar and Tipu having been thus overthrown the settlement of the country was effected by the restoration of Mysore proper to the representative of the ancient ruling family whose rights had been usurped by Haidar. The greater part of the remainder was then divided between the English and the Nizām, the districts of Kanara, Coimbatore and Wynaad falling to the share of the former. A portion was also reserved for the Peshwa, with the view to its forming a basis for a new treaty with the Mahratta empire. Arrangements were at the same time made by which Mysore should be precluded from again becoming a great military power, and it was stipulated that the heads of all the passes on the tableland should remain permanently in the hands of the British.

Summary of acquisitions made in different parts of the Presidency

69. The military history of the Madras Presidency ceases with the treaty of 1799 ; all subsequent additions of territory, with one exception, having been peacefully acquired. The following is a brief summary of all the territorial acquisitions made in the south. A trading settlement was established at Masulipatam in 1611 and in 1639 and in 1690 Fort St. George and Fort St. David were built at Madras and Tevanapatam, respectively, with the permission of the ruling Hindu princes. The fort of Tellicherry in Malabar was similarly established by the Bombay Government in 1683. The first footing in Tanjore was gained in 1749 by the capture of Devakōttai which was afterwards ceded on condition that the English desisted from helping a rival claimant to the throne. Mirzapha Jang and Salabat Jang had ceded Masulipatam and portions of the Northern Circars to the French ; but, on the capture of Masulipatam by the English in 1759, the influence of the French was broken, and the town of Masulipatam and a considerable tract of the surrounding territory were made over to the English. In 1765 sanads ceding the whole of the Northern Circars were obtained direct from the Padshah of Delhi, but the Madras Government thought it more politic to obtain the consent of the Nizam also, and in 1768 the five Circars of Ellore, Chicacole, Rajahmundry, Mustafanagar, and Murtuzanagar or Guntūr were ceded by treaty, on the English agreeing to pay an annual subsidy of nine lakhs, and to furnish military assistance when required. The Dutch settlements of Pulicat, Sadras and Negapatam were captured for the second and last time in 1795, and ceded by the series of treaties closing the Napoleonic wars. The earlier wars with Haidar and Tipu were concluded with a peace on the basis of mutual restitution of territory, but by the treaty of 1792 the districts of Malabar and Salem and the Dindigul division of Madura were acquired by the English, and on the partition of Tipu's territory in 1799 the districts of Kanara and Coimbatore fell to the share of the British Government. During the wars of the eighteenth century the English more than once interfered in the disputes between the Raja of Tanjore and the Nawab of the Carnatic, and in 1778 a treaty was concluded by which Nagore and 277 villages were ceded to the Company. The internal affairs of the Tanjore kingdom continued to go from bad to worse, and after a turbulent period of disputed succession the rightful claimant to the throne, on being put into power in 1799, executed a treaty resigning the administration of the kingdom into the hands of the British on the understanding that he would receive a provision of one lakh of pagodas and one-fifth of the net

revenues. The titular dignity became extinct in 1855 through failure of male heirs. In 1800 a new treaty was entered into with the Nizam by which a considerable increase was made in the British subsidiary force, on account of which the Nizam ceded all the territories he had acquired by the Mysore treaties of 1792 and 1799 together with the taluk of Adōni and all other taluks situated to the south of the rivers Tungabhadra and Kistna. These are known by the name of the Ceded districts, and comprise the provinces of Bellary, Anantapur and Cuddapah. The English having in all the earlier wars of the peninsula supported the cause of Muhammad Ali, Nawab of the Carnatic, and having in fact secured him both the original possession of his kingdom and the power of retaining it, the revenues of the Carnatic were looked to for the defrayal of the expenses of the wars, and with this view the present district of Chingleput, then known as the jaghir, was made over to the Company in 1763. This was rented to the Nawab for some time, but in 1780 the British Government took the management into their own hands. As new wars arose fresh agreements were made, and a series of treaties were executed culminating in that of 1792, three years before the death of Muhammad Ali and the accession of Umdat-ul-Umra, by which the Nawab agreed to pay a large subsidy, and, in order to secure punctual payment the English were authorized to collect tribute direct from a large number of the pālegārs or local chiefs. In the event of the balance not being paid, the English were further authorized to assume the management of certain specified districts. In accordance with this treaty tribute was collected throughout a great part of the Tinnevelly and Madura districts, and in 1795 the Company assumed the entire management of the Rāmnād district. On the fall of Seringapatam in 1799 it was discovered that both Muhammad Ali and Umdat-ul-Umra had been carrying on a treasonable correspondence with Mysore and the treaty of 1792 having thus been infringed the British Government resolved to assume the entire management of the Carnatic, and proposed a treaty for the purpose. Umdat-ul-Umra having died before arrangements were concluded, and his reputed son Ali Husain having rejected the terms offered him, another grandson of Muhammad Ali named Azim-ud-Daula was declared his successor, and an arrangement was entered into on the 31st July 1801, by which he resigned the Government of the country into the hands of the British, retaining the titular dignity and receiving a liberal stipend. The effect of this treaty was to bring under British rule the whole of the country from the Northern Circars to Cape Comorin, with the exception of the French settlements of Pondicherry and Karikal and the Danish settlement of Tranquebar. The titular dignity of Nawab of the Carnatic was continued until 1855 when there was a failure of direct heirs. The present representative of the family bears the title of Prince of Arcot, and has the position of the first Muhammadan nobleman of the Presidency. In 1838 internal mismanagement and suspicion of treasonable intrigue on the part of the Nawab of Kurnool led to the occupation of his territory by an armed force and to its subsequent annexation. Tranquebar was ceded by the Danes in 1845. The district of North Kanara was transferred from this Presidency to the Bombay Presidency in 1862.

The last century

70. Since the beginning of the nineteenth century, Madras has known no regular war ; but occasional disturbances have called for measures of military repression. The Pālegārs or local chieftains in the south long adhered to their independence after their country was ceded to the British. On the West Coast, the religious fanaticism of the Māppillas has more than once led to bloodshed ; until 1921, when the propensity received a stimulus from agitators from outside the district, the outbreaks were generally of an isolated and sporadic nature ; those immediately concerned invariably preferred death to capture ; and more frequent outrages were only prevented by the removal from Malabar of many of the persons most likely to disturb the peace. In the north, the tribes occupying the hills which till recently formed part of the districts of

Ganjām and Vizagapatam have only in comparatively recent times been brought under a stable form of government and taught to respect the forces of law and order and the events of 1922 have shown that they may still be excited to rebellion. In 1836, the zamindari of Goomsūr in Ganjām was attacked by Government on account of the rebellious conduct of the chief. An inquiry then instituted revealed the wide prevalence among the Khonds of human sacrifice under the name of "meriah." The practice was subsequently suppressed by a special agency. In 1879 the country known by the name of Rampa, then in the Gōdāvari district, was the scene of disturbances which it took a considerable body of troops nearly two years to put down. Troops again had to be called out in 1882 when the Hindus and Muhammadans of Salem came into collision in connexion with a question of religious processions. In the extreme south the long-standing resentment of the Maravas against the pretensions of the Shanars—a caste whose hereditary profession was toddy-drawing—to a higher social and religious position, broke out into what were known as the Anti-Shanar riots in 1899, when the town of Sivakasi was looted and burned by five thousand Maravas and other villages were attacked with some loss of life. Military aid had to be called in to restore peace and a punitive police force was stationed in the area of the disturbance for some years.

Recent events

71. The first few years of the present century were uneventful apart from a few local riots due to religious or factious disputes, but in 1906 the political unrest which had developed in other parts of India spread to Madras and, fanned by inflammatory speeches, exhibited itself in the next two or three years in strikes and riots, the most serious of which took the form of an attack by a large mob on the European club at Cocanada in 1907 and the gutting of public offices and assaults on Government officers at Tinnevelly and Tuticorin in 1908. These ebullitions of mob violence were short-lived, but the anarchical movement continued to attract votaries whose vanity was flattered by a section of the public press, and culminated in June 1911 in the murder of Mr. R. W. d'E. Ashe, the Collector of Tinnevelly, by one of these votaries who immediately afterwards shot himself. The investigations which ensued showed that there had been a widespread conspiracy; one of those prominently concerned received a long sentence of imprisonment and others were driven into forced inactivity. The outbreak of the Great War in 1914 was accompanied by manifestations of loyalty from all classes and creeds. The chiefs and notables of the Presidency laid their resources at the disposal of His Majesty and the Madras War Fund, instituted at the instance of His Excellency the Governor, received subscriptions amounting to Rs. 27 lakhs in the first ten months and finally reached Rs. 74·63 lakhs by the 31st March 1919. The fund was principally devoted to the equipment and maintenance of the hospital ship "Madras" and the river hospital ship "Sikkim," but it was also used to purchase horses and to provide a number of motor cyclists and a corps of gardeners who were despatched to Mesopotamia. In addition to these activities the Ladies' depot maintained a continuous supply of comforts to the troops serving in the East and considerable sums were contributed to the Imperial Relief Fund and other special funds. As the war went on and the need for men became greater, a regular recruiting agency was organized and finally the Presidency contributed 32,718 combatants and 28,895 non-combatants to the Indian Army. The decay of the military tradition in Madras rendered the awakening of the old martial spirit which fed the armies of Cornwallis and Wellesley no easy task, but the final result was satisfactory and the men served with credit in various theatres of the war and more especially in Mesopotamia. In September 1914 the German raider "Emden" bombarded Madras which was thus the only part of India directly attacked by the enemy. The bombardment caused considerable panic at the time and it was not till the next year that confidence was fully restored. In other respects the Presidency was affected by the war in much the same way as the rest of India,—possibly

to rather a less extent than more martial and industrial provinces. The restrictions on trade and shipping, coupled with an unfavourable season in 1918 and the inevitable rise in prices, led to a certain amount of real distress and some rioting. At the same time there was a fresh outbreak of Shanar-Maravar ill-feeling in the neighbourhood of Kamudi in the Rāmnād district which necessitated a fresh imposition of punitive police. The dislocation of trade was naturally enormous and there has yet been no real recovery ; but mention must be made of the very large Government transactions during the war on account of the purchase of tanned hides by the War Office. A very large proportion of the British Army was shod with Madras leather.

The development of the political situation since the beginning of the war has been most remarkable. The year 1916 saw the beginnings of a new Home Rule agitation accompanied by organized efforts to stir up ill-will against the Government and the European community and to work on the feelings of the student population. Steps to counter these efforts were followed in 1917 by an unprecedented outbreak of violent and provocative language on the part of the extremist party which led to action under both the Press Act of 1910 and the Defence of India Act. The excesses of the extremists, however, eventually roused opposition and in some measure led to the organization of the non-Brahman party and its subsequent rise to power. A split occurred between the Muhammadan and Hindu elements in the Home Rule party and its subsequent energies were directed to an attempt at a labour organization on political lines. It was in August of this year—1917—that the now famous pronouncement of the Secretary of State was made as to the development of India on self-governing lines ; and the Viceroy and Mr. Montagu paid their visit to the Presidency in an atmosphere which was generally characterised by an unprecedented degree of political disturbance and mutual recriminations. The year 1918 saw the end of the war and the continuance of the agitation with much violent speaking and writing, which occasioned frequent resort to the penalties provided by the Press Act of 1910. Early in the next year the Hindu position turned on the protest against the Rowlatt Bills. In March 1919 occurred the disturbances in the Punjab which necessitated the proclamation of Martial Law followed by the Commission of Inquiry into its administration. The action of General Dyer at Jallianwallah Bagh and the atrocities alleged to have accompanied the suppression of the disturbances have formed the stock in trade of the extremist orator ever since. On the other hand the peace terms to be imposed on Turkey caused some anxiety as to the attitude of the Muhammadan population, and though their leaders, with one or two notorious exceptions, represented their views at the time with great moderation, the question of the guardianship of the Holy places and the temporal power of the Khalif has since formed the war-cry of the Khilafat agitation. The more moderate elements of the Home Rule party adopted a more reasonable and constitutional attitude after the introduction of the Government of India Act which inaugurated the Reforms, but the more extreme members, both Hindu and Muhammadan, remained irreconcilable and united under the leadership of M. K. Gandhi and the Indian National Congress in pursuing the policy which came to be known by the name of Non-co-operation. The party which adopted this creed refused to listen to the gracious message of His Majesty the King to the people of India on the passing of the Reforms Act at the end of 1919 and devoted all its efforts to boycotting the elections to the new Councils which took place in 1920. They induced or compelled a few persons to resign their titles and to abstain from voting at the elections, but on the whole their efforts were unsuccessful and the percentage of electors who recorded their votes surpassed expectations. The result of the elections was a decisive victory for the non-Brahman party and a Ministry was eventually formed of three non-Brahmans. The new Legislative Council was inaugurated when His Royal Highness the Duke of Connaught visited Madras in January 1921. It is no exaggeration to say that no Government could have been faced with greater difficulties on its accession

to power. In addition to the financial stringency, which was partly a legacy of the war and the necessity which the rise in prices imposed of increasing salaries all round, and partly a result of the settlement by which this Presidency has to contribute a very large proportion of its revenues to the Central Government, the new Government were met and hampered at every turn by the malicious activities of the non-co-operators. Among the principal items in their progromme, the boycott of Government schools and courts of law met with only a little temporary enthusiasm and had no practical effect ; the attempted boycotting of foreign cloth may have accentuated the position brought about by bad trade conditions ; but the chief effect of the methods by which they professed to promote temperance was a very serious reduction of the public revenue without appreciable diminution in the consumption of drink. In spite of lip service to the principle of " non-violence," they did not hesitate to employ intimidation and actual physical compulsion to prevent bidding at the auctions of licences and to keep customers away from the shops ; and similar methods were employed to bring about the suspension of all business on set occasions when hartals were proclaimed. In the direction of the exploitation of labour for political ends their efforts culminated in a series of very serious disorders in the city of Madras from July to September 1921, in the course of which the police were compelled to open fire on several occasions ; and troops had to be called in to assist them ; and other forms taken by the movement were the encouragement of defiance to the Forest regulations, which led to bloodshed on more than one occasion, and a definite campaign for the non-payment of taxes and civil disobedience, which was actually attempted on a large scale in the Guntūr district at the beginning of 1922. (See General Summary.)

But without doubt the crowning achievement of the Non-co-operation and Khilafat agitation was the Māppilla rebellion of 1921. The Māppillas of South Malabar are well known for their fanaticism and their liability to periodical outbursts and they obviously provided the most inflammable of material to the agitator who dwelt on alleged insults to their religion. There were signs of trouble early in the year, but firm action on the part of the District officers checked the agitation and produced an outward appearance of quietness ; but at the beginning of August 1921 the police came into conflict with a crowd of Māppillas in attempting to arrest an offender and were compelled to give up the attempt. It was then clear that serious trouble was imminent. Steps were taken to reinforce the troops in the district, and on the 20th of the month the District Magistrate with a body of troops and police went to Tiruran-gadi to arrest the ringleaders. The attempt was unsuccessful ; the force was attacked by enormous mobs of Māppillas and two European officers—one in the police and the other in the Leinster Regiment—were killed ; and within a few days the rebellion had spread over the Ernad and Walluvanad taluks and parts of two others. The railway line was torn up in many places, road communications were blocked and public offices were attacked and looted. Military reinforcements were hurried to the spot and a small garrison which had been cut off at Malappuram, the centre of the rebellion area, was relieved at the end of August after a severe engagement at a place called Pukkottur, in which after five hours' fighting over 400 of the rebels must have been killed. Another British police officer was killed in this engagement and several men were wounded. Almost from the beginning the rising definitely assumed the form of fanatical attacks on all non-Muhammadans ; the Hindus were the chief sufferers, many being murdered and others forcibly converted to Muhammadanism. The rebels adopted guerilla methods of warfare and over a full brigade of regular troops including detachments of the Leinster, Suffolk and Dorset Regiments, two Gurkha Battalions, a Garhwali and a Burma Battalion and a specially raised force of 700 military police had to be employed before the rebellion was finally suppressed. Twenty-four policemen were killed and 29 wounded and 26 of the military were killed and 103 wounded in the course of the operations ; Martial Law

which was proclaimed on the 24th August 1921 was withdrawn on 24th February 1922, but it was not until August of that year that the last of the rebel leaders was accounted for. In the magnitude of the operations the rebellion surpassed all modern experience in the Madras Presidency ; and it has naturally left behind it a bitterness of feeling and a number of problems which it will take many years to assuage and to solve. A most distressing occurrence which took place on 19th November 1921 was the death by asphyxiation of 70 Māppilla prisoners in the train, while they were being conveyed from the disturbed area to Bellary jail. The incident was made the subject of a special Committee of Inquiry on whose report the Government of India passed orders in September 1922.

Such were the circumstances in which the Reforms were started in the Madras Presidency and it is a tribute to the sound commonsense of the more responsible elements who found themselves in the Legislative Council that they were able to vindicate, to the extent to which they did, the value and the dignity of constitutional Government. It must of course be remembered that in spite of the virulence of the agitation, the large majority of the agricultural population of the Presidency remained entirely unaffected, at any rate until 1921. In that year, it is true, there were indications of a generally diminished respect for the law, but the movement subsided after the arrest and conviction of Gandhi in March 1922 and the calmness with which this action was received seems to show that the people were tired of the tyranny which had been exercised in his name.

72. This brief summary covers events up to the beginning of 1922, at which point the current summary of Part I of this report begins.

FORM OF ADMINISTRATION

The Local Government

73. The executive civil Government of the Madras Presidency is subject to the superintendence, direction and control of the Governor-General in Council. Under the Government of India Act, 1915, as amended by the Government of India Act, 1919, rules have been framed under which certain subjects have been declared to be provincial and these again have been divided into reserved and transferred subjects: the administration in respect of reserved subjects is in the hands of the Governor in Council and in respect of transferred subjects in those of the Governor acting with his ministers. The term "Local Government" means the Governor in Council or the Governor acting with his ministers, as the case may be. The Council includes the Governor, who is the President, and four members of whom one is appointed by the Governor as the Vice-President; one of the members at least must be a person who, at the time of his appointment, has been for at least twelve years in the service of the Crown in India. The Governor and the members of the Executive Council are appointed by the Crown. The terms for which they may hold office are not limited by any legal enactment. The Secretary of State has directed that a member of the Executive Council should hold office for five years exclusive of any time during which he draws less than full pay, not having himself been granted leave. If a Governor or member of the Executive Council returns to Europe or leaves India with intent to return to Europe, his office is deemed to become vacant. The ministers are appointed by the Governor and hold office during his pleasure; but they must not be members of the Executive Council or officials, and no minister can hold office for a longer period than six months unless he is, or becomes, an elected member of the local legislature. The Governor in Council may grant a member of the Executive Council leave of absence under medical certificate for a period not exceeding six months. When a vacancy occurs in the office of the Governor and there is no successor on the spot to supply the vacancy, the Vice-President or, if he is absent, the senior member of the Executive Council assumes office as acting Governor. If a vacancy occurs in the office of a member of the Executive Council and there is no successor present on the spot, it may be filled by the Governor in Council by the appointment as temporary member of any person qualified for such appointment. The Governor may make rules and orders for the transaction of business in his Executive Council and with his ministers. On questions brought before the Executive Council, the opinion of the majority ordinarily prevails, the Governor or other presiding member having a second or casting vote in the event of an equal division of opinion; but when any measure is proposed which in his judgment affects the safety, tranquillity or interests of the province or any part thereof, and he differs from the opinion of the majority of the members of the Executive Council, the Governor has power to act on his own authority and responsibility. The Governor in Council is not empowered to declare war or to make treaties and has no immediate control over the military administration of the Presidency. He corresponds directly with the Secretary of State except in certain cases. The authority of the Local Government is not superseded by the presence in its province of the Governor-General. The Local Government is empowered to undertake works of public utility, not being railways, which are not expected to cost more than fifty lakhs of rupees. The Governor in Council, or the Governor acting with the ministers, possesses all the civil patronage of the Presidency which is not retained by the Secretary of State or delegated to subordinate members of the administration. Despatches to the Secretary of State in the reserved departments are signed by the Governor and all the members of the Executive Council; despatches in the transferred departments are signed by His Excellency alone. Letters

Government of India Act 1919
s. 45 (1)
s. 46 (1)
s. 134 (4)
s. 48
s. 47 (2)
ss. 46 (2) & 47 (1)
s. 87 (1)
s. 52 (1) & (2)
s. 86 (1)
s. 91 (1)
s. 92
s. 49 (2)
s. 50 (1)
s. 50 (2)
s. 44
s. 45 (3)

addressed to the Government of India and all orders of the Local Government are signed by an officer of the Secretariat. All correspondence regarding public business reaches Government through the Secretariat.

Legislative Council

74. The Legislative Council is fully dealt with in Chapter III.

Financial transactions of Government

75. The year 1921 witnessed the introduction of the Reforms, which brought about a complete change in the financial relations between the Central and Provincial Governments, involving important changes in the general form of accounts and in the prescribed major heads. Till then the Provincial Government had no separate revenues of their own, their resources being obtained mainly from a share of divided heads of revenue and from lump assignments from Imperial revenues. The transactions of the Imperial and Provincial sections were accordingly combined, but shown under distinct divisions, against each major head of revenue and expenditure, in the general accounts and estimates. Now, however, definite sources of revenue have been allocated to the Provincial Government and there has been a complete separation between the revenues and the expenditure of the Central and Provincial Governments, though all monies received from sources of provincial revenue are paid to the public account of which the Governor-General in Council continues to be the custodian. The estimates and accounts of the Government of India now embrace the transactions of the Central Government only under each head of account, the transactions of the Provincial Government appearing in them merely as a net addition to or withdrawal from their banking account with the Central Government. The Provincial Government is concerned with central subjects only in so far as they act as agents of the Government of India in their administration and in such capacity are vested with certain financial powers.

Provincial settlement

76. Prior to 1921–22 all items of receipts and expenditure which were creditable or debitable to Government were either Imperial or Provincial according as they appertained to the Supreme or to the Local Government. This classification had no statutory basis and depended upon the terms of the "Provincial Settlement," as the administrative arrangements made between the Government of India and the Local Government and approved by the Secretary of State for the distribution of revenues and expenditure between these two Governments were designated. The history of these provincial settlements, which may be divided into five periods, represents a succession of expedients by which the Central Government secured from local sources of revenue such share as, added to the profits of commercial departments and revenue the locale of which was no guide to its true incidence, was necessary to enable them to carry on the services which they must of necessity administer. These periods were also marked by a progressive increase in the financial powers and responsibilities entrusted to the Local Governments. In the first period, prior to 1871, both revenue and expenditure were completely centralized. The Local Government could not keep any part of its collections and it could not undertake any expenditure without specific sanction. In the second period, from 1871 to 1882, certain limited allotments were given for expenditure on certain specified services. Then came the third period from 1882 to 1904 when the provinces were given a share in certain growing heads of revenue, the object being mainly to stimulate their interest in collections. In 1904 commenced a new period known as the period of quasi-permanent settlements in which the principle of equality was first recognized. It was laid down in the words of the Decentralization Commission Report that "so far as possible, the same share of the chief sources of revenue should be given to each province to ensure a reasonable equality of treatment." In 1911 began what was known as the permanent settlement. In this settlement the principle of equal treatment was not fully carried out. The intention underlying it was on the one hand to give more elasticity to the settlements and more freedom to Local Governments in working

1871

1882

1904

1911

them, and on the other hand to protect the general tax-payer of India against possible mismanagement in any particular province and to put an end to the frequent and undesirable controversies over the adequacy of the existing settlements. But it was largely vitiated by the power retained by the Government of India of distributing their surplus revenues in the shape of grants or doles to the provinces without any regard to equity or the source from which they had been derived. The permanent settlement was in force until 1921-22, when the complete separation between the finances of the Central Government and those of the Provincial Governments, which was found to be an essential corollary of the constitutional reforms, took shape in the system now prevailing. Divided heads were abolished and each source of revenue became either wholly central or wholly provincial, land revenue, excise and stamps being made to contribute the major part of the provincial income; but the resource left to the Central Government under this arrangement being insufficient to enable it to balance its budget, contributions are levied from the provinces to diminish the deficit. Under the statutory rule governing the matter, out of a total of 983 lakhs of rupees contributed to the Central Government by all the provinces the initial contribution of the Madras Presidency was fixed at Rs. 348 lakhs. The rule provides that the total of the contributions shall not exceed Rs. 983 lakhs and that if it is reduced below that figure the reduction shall be in the contributions of those provinces only which are now called upon to pay more than a certain specified proportion. Any reduction would therefore benefit Madras whose payment is now most in excess of the proportion to be aimed at ; but there has hitherto been no reduction and the levy of such a large contribution as Rs. 348 lakhs has been the subject of strong and continued protests.

1921

77. The power of borrowing was never conceded to Provincial Governments prior to the Reforms. That power has now been conferred by section 30 (1) (*a*) of the Government of India Act under which a Local Government may, on behalf and in the name of the Secretary of State in Council, raise money on the security of the revenues allocated to it under the Act, and make proper assurances for that purpose. The rules framed under this section lay down the following as the purposes for which loans may be raised :—

Provincial loans

(*a*) to meet capital expenditure on the construction or acquisition (including the acquisition of land, maintenance during construction and equipment) of any work or permanent asset of a material character in connexion with a project of lasting public utility, provided that—

(i) the proposed expenditure is so large that it cannot reasonably be met from current revenues ; and

(ii) if the project appears to the Governor-General in Council unlikely to yield a return of not less than such percentage as he may from time to time by order prescribe, arrangements are to be made for the amortisation of the debt ;

(*b*) to meet any classes of expenditure on irrigation which, under rules in force before the passing of the Act, had been met from loan funds ;

(*c*) for the giving of relief and the establishment and maintenance of relief works in times of famine or scarcity ;

(*d*) for the financing of the Provincial Loan Account ; and

(*e*) for the repayment or consolidation of loans raised in accordance with these rules or the repayment of advances made by the Governor-General in Council.

78. The only restriction on the powers of Local Governments to raise loans is that no loan shall be raised, in the case of loans to be raised in India, without the sanction of the Governor-General in Council or, in the case of loans to be raised outside India, of the Secretary of State in Council, and in sanctioning the raising of the loan the Governor-General in Council or the Secretary of State may specify the amount of the issue and any or all of the conditions under which the loan shall be raised.

In practice it has been found more convenient for the Local Government to borrow from the Government of India than to go into the market separately.

79. Prior to the Reforms the Provincial Loan Account, the capital transactions of which did not appear in the estimates, was financed from Imperial revenues, the Local Government paying the interest charges thereon. Under Devolution Rule 23, the account has been provincialized. Any moneys which on the 1st day of April 1921 were owed to the Governor-General in Council on account of advances made from the Provincial Loan Account were converted into an advance to the Local Government from the revenues of India, carrying interest at a rate calculated on the average rate carried by the total amount owed to the Governor-General in Council on this account on the 31st March 1921. The principal amount of the advance has also to be repaid to the Government of India in instalments over a twelve-year period. The Local Government is at liberty to repay the advance in a shorter period. The Madras Government are paying a sum of Rs. 9·50 lakhs per annum towards the redemption of the Provincial Loan Account, which stood at Rs. 109·86 lakhs at the beginning of 1921–22.

Taxation

80. In the pre-reform period the Government of India completely controlled the imposition of any taxation in British India apart from local taxes which were raised by Local Bodies. The scheduled taxes rules framed under section 80-A (3) (*a*) of the Government of India Act have, for the first time, given local legislatures powers of taxation without the previous sanction of the Governor-General in respect of the following matters :—

(1) A tax on land put to uses other than agricultural.
(2) A tax on succession or on acquisition by survivorship in a joint family.
(3) A tax on any form of betting or gambling permitted by law.
(4) A tax on advertisements.
(5) A tax on amusements.
(6) A tax on any specified luxury.
(7) A registration fee.
(8) A stamp duty other than duties of which the amount is fixed by Indian legislation.

Capital outlay on irrigation works

81. Prior to the introduction of the Reforms, capital expenditure on major irrigation works was provided entirely by the Imperial Government either from revenues or from loans. Under Rule 24 of the Devolution Rules the capital sum spent by the Governor-General in Council upon the construction of productive and protective irrigation works and all other works financed from loan funds is treated as an advance made to the Local Government from the revenues of India. This advance carries interest, in the case of outlay up to the end of the financial year 1916–17, at the rate of 3·3252 per cent ; and, in the case of outlay incurred after the financial year 1916–17 up to the end of the financial year 1920–21, at the rate of 5·1979 per cent. With effect from 1921-22 the financing of capital irrigation works has become the concern of the Provincial Government.

Famine relief

82. The financing of famine expenditure has also been placed on a new basis under the Reforms. Under Rule 29 of the Devolution Rules the Madras Government is required to maintain a famine insurance fund by contributing from its resources a fixed sum of Rs. 6·61 lakhs every year. The annual contribution is to be devoted in the first instance to outlay on the construction of protective irrigation works, and, if necessary, on relief measures, the sum not required for these purposes being utilized in building up a famine insurance fund. The balance at the credit of the fund is regarded as invested with the Central Government, which pays interest on it, and it will be available for application when necessary to any of the objects mentioned above and also to the grant of advances to cultivators. The credits and debits to the fund are exhibited in a separate head under debt heads. It is also laid down that the annual contribution may be

suspended when the accumulated total of the fund is not less than six times the amount of the annual assignment.

Revenue in 1921-22

83. The principal sources of revenue and the objects on which Provincial funds are expended can be learnt from an examination of the Provincial accounts for the year. The total revenue (excluding opening balance) received during the financial year 1st April 1921 to 31st March 1922 amounted to Rs. 2,465·05 lakhs of which the amounts credited to "Central" and "Provincial" were respectively Rs. 1,291·63 lakhs and Rs. 1,173·42 lakhs. These figures have been arrived at after adding to "Central" and deducting from "Provincial" the Provincial contribution of Rs. 348 lakhs to the Government of India and the assignment to the Government of India of Rs. 35·81 lakhs on account of income-tax adjustments. The amount expended from Provincial funds was Rs. 1,280·24 lakhs, leaving a deficit of Rs. 106·82 lakhs. Nearly two-thirds of the Provincial revenue was derived from Land Revenue which amounted to Rs. 726·63 lakhs. The next important source of revenue was Excise which yielded Rs. 488·17 lakhs. Other important items of revenue were Stamps, Rs. 189·85 lakhs, Forests, Rs. 48·57 lakhs and Registration, Rs. 32·56 lakhs.

Expenditure in 1921-22

84. The principal items of expenditure were Land Revenue, Rs. 129·04 lakhs, General Administration, Rs. 134·06 lakhs, Police, Rs. 196·67 lakhs, Education, Rs. 142·30 lakhs, Civil Works, Rs. 129·78 lakhs, Administration of Justice, Rs. 94·18 lakhs, Forests, Rs. 51·94 lakhs, Medical, Rs. 54·46 lakhs, Excise, Rs. 30·83 lakhs, Superannuation Allowances and Pensions, Rs. 45·67 lakhs, Stationery and Printing, Rs. 24·26 lakhs, Public Health, Rs. 26·63 lakhs and Agriculture, Rs. 25·18 lakhs.

Budget procedure

85. The procedure in connexion with the framing of Provincial budgets and their passage through the Legislative Council has, under the recent Reforms, been materially changed in certain respects. For example, the sanction of the Government of India is no longer required. The procedure laid down in full in the Legislative Council rules is briefly summarized below. A statement of the estimated annual expenditure and revenues of the province, referred to as the "budget," is presented to the Council on a day appointed by the Governor. A separate demand has to be made in respect of the grant proposed by each department of the Government, and this demand should first contain a statement of the total grant proposed and then a statement of the detailed estimate under each grant divided into items. The budget is then dealt with by the Council in two stages, a general discussion and the voting of demands for grants. The general discussion begins on a day appointed by the Governor subsequent to the day on which the budget was presented, and it continues for such time as the Governor may allot for this purpose. The discussion may concern the budget as a whole, or any question of principle involved therein, but no motion may be moved at this stage, nor may the budget be voted upon. Then, after an interval during which motions for the reduction or omission of grants are submitted, discussion of demands follows for which a maximum of 12 days may be allotted. Further details of the financial work of the Council will be found in Chapter III under the heading "Legislating authority." If the Legislative Council votes a reduction or omission of a demand relating to a reserved subject, it is open to His Excellency the Governor to restore the provision by giving a certificate that the expenditure provided for by the demand is essential to the discharge of his responsibility for the subject, but no such action can be taken when a demand pertaining to a transferred department is affected.

Committees

86. Under a statutory rule a Committee on Public accounts has been established to scrutinize the audit and appropriation accounts of the province, and to satisfy itself that the money voted by the Council has been spent within the scope of the demand granted by the Council. It is its duty to bring to the notice of the Council every re-appropriation from one grant to another grant, every re-appropriation within a grant which is not made in accordance with the rules regulating the functions

of the Finance Department or which has the effect of increasing the expenditure on an item, the provision for which has been specially reduced by a vote of the Council, and expenditure which the Finance Department wishes to bring to the notice of the Council. An advisory Finance Committee has also been constituted to examine all proposals for new expenditure before they are placed before the Council.

Financial restrictions on the powers of the Local Government

87. The control of the Local Government over the funds at their disposal is limited by certain rules which prescribe that the sanction of the Secretary of State in Council is necessary before expenditure can be incurred on certain accounts. In this matter, a clear distinction has been drawn between powers to sanction and incur expenditure on transferred subjects and powers in relation to expenditure on reserved subjects. The Joint Parliamentary Committee appointed to revise the draft rules made under the Government of India Act of 1919 have stated that it is the intention of that Act that expenditure on transferred subjects should, with the narrowest possible reservations, be within the exclusive control of the Provincial legislature. The main reservations laid down are that the Secretary of State must retain control over expenditure on transferred subjects which is likely to affect the prospects or rights of the all-India services, which he recruits and will continue to control; and that he should also retain power to control the purchase of stores in the United Kingdom.

88. Thus, in respect of transferred subjects, the sanction of the Secretary of State in Council is necessary for the creation of any new, or the abolition of any existing, permanent post, or for the increase or reduction of the pay attached to any permanent post, if the post is one which would ordinarily be held by a member of an all-India service, or for the increase or reduction of the cadre of an all-India service; for the creation of a permanent post on a maximum rate of pay exceeding Rs. 1,200 a month; for the increase of the maximum pay of a sanctioned permanent post to an amount exceeding Rs. 1,200 a month; for the creation of a temporary post with pay exceeding Rs. 4,000 a month, or the extension beyond a period of two years of a temporary post with pay exceeding Rs. 1,200 a month; and for any expenditure on the purchase of imported stores or stationery otherwise than in accordance with such rules as may be made in this behalf by the Secretary of State in Council. Subject to limitations such as these, Ministers are as free as possible from external control, and the control to be exercised over expenditure on transferred subjects is exercised by the Provincial legislature, and by that body alone.

89. In regard to expenditure on reserved subjects, in addition to the above, further restrictions as given below have been imposed. Thus, the sanction of the Secretary of State in Council is necessary to capital expenditure upon irrigation and navigation works including docks and harbours, and upon projects for drainage, embankments and water storage and the utilization of power in any of the following cases, viz., where the project concerned materially affects the interests of more than one Local Government; where the original estimate exceeds Rs. 50 lakhs; where a revised estimate exceeds by 15 per cent an original estimate sanctioned by the Secretary of State in Council; and where a further revised estimate is proposed, after one revised estimate has already been sanctioned by the Secretary of State in Council. Such sanction is also necessary for a revision of permanent establishment involving additional establishment charges exceeding Rs. 5 lakhs a year; provided that, if a resolution has been passed by the Legislative Council recommending an increase of establishment charges for this purpose, the sanction of the Secretary of State in Council is not required unless the expenditure so recommended exceeds Rs. 15 lakhs a year; for any increase of the contract, sumptuary or furniture grant of the Governor; and for expenditure on original works on the residences of the Governor exceeding Rs. 50,000 in a year.

90. The Local Government also exercise certain limited powers in their capacity as agent to the Governor-General in Council in the administration of central subjects. For instance, they can sanction the creation or abolition of a permanent post provided that the maximum pay of the post does not exceed Rs. 500; increase or reduce the pay of a permanent post or of a Government servant in permanent employment, provided that the maximum pay of the post or of the Government servant does not exceed Rs. 500 after the increase or before the reduction, as the case may be; sanction the creation of a temporary post on pay not exceeding Rs. 1,500 for not more than six months if the pay exceeds Rs. 500, and for any specified period, if the pay does not exceed Rs. 500; and sanction revision of the pay of an establishment, provided that the revision does not affect posts carrying pay exceeding Rs. 500, that the additional expenditure involved does not exceed Rs. 6,000 a year and that the revision does not affect a whole class or grade of Government servants.

Petitions

91. The recognized privilege, under which a person aggrieved by the action of any Government official may ordinarily appeal to the next higher authority by means of a petition and receive back a written reply, either refusing or promising redress, is of much importance in all branches of the administration, but especially in matters dealing with the land revenue, owing to the number of small holdings of land under the ryotwari tenure and the consequent multiplication of details in the administration of the land revenue. An aggrieved person may generally appeal in succession to the officers representing each grade in the department concerned, and may finally address in turn the Local Government, the Government of India and the Secretary of State. The three last-named authorities have prescribed certain rules to check the indiscriminate presentation of petitions; in some cases a period is fixed within which the appeal must be filed, in others a restriction is imposed upon the number of authorities an aggrieved official may invoke with reference to the status of such official, but there is, in general, no check except where a legal enactment or regulation provides for the appeal and imposes limits on its presentation. The Government do not act as a channel of communication for memorials addressed to Parliament.

The Civil Service

92. The Executive and, outside the Presidency town, the Judicial administration are in the hands of the Civil Service, in which are included both the Imperial branch called the Indian Civil Service and the Provincial branch now known as the Madras Civil Service.

The Indian Civil Service

93. The Indian Civil Service, designated until 1890 the "Covenanted Civil Service of India," is the modern representative of the merchants, factors and writers who were employed under covenant by the East India Company. Until 1919 this service was recruited only by competitive examination in London. During the war, however, there were few recruits and to fill up vacancies power was taken for a limited period under the Indian Civil Service (Temporary Provisions) Act, 1915, to select candidates by nomination both in England and in India; and further changes have been introduced after the amendment of the Government of India Act in 1919, mainly with a view to provide fresh avenues of recruitment whereby effect may be given to the recommendation made by the Royal Commission on the Public Services in India (1912—1915) and amplified in the Report on Indian Constitutional Reforms, that Indians should be appointed more extensively in the public services. The five methods of recruitment now are open competitive examination in London, separate competitive examination in India, nomination in India, appointment from the Indian bar, and promotion from the Provincial Civil Service. The Provincial or Madras Civil Service was constituted in 1892 as a result of the recommendations of the Public Service Commission (1886–87) to fill appointments, some of which had till then been reserved for the Indian Civil Service while others had been held by what was then called the Uncovenanted Civil Service. It comprises on the judicial side Subordinate Judges and District Munsifs, recruited for the most part direct to the lower of these ranks from the legal profession and engaged in dealing

5 & 6, Geo. V, c. 87

Provincial Civil Service

Government of India Act, s. 47 (2)

with civil litigation; and on the executive side Deputy Collectors and Magistrates, a few of whom have been recruited by competitive examination or direct nomination, but the majority by promotion from the Subordinate Civil Service. The lower administrative appointments above the ministerial grade form the Subordinate Civil Service.

G. of I. Act, s. 101 (4)

94. At least one of the Members of the Executive Council of the Governor of Fort St. George must be a person who at the time of his appointment has been in the service of the Crown in India for at least 12 years and not less than one-third of the Judges of the High Court of Judicature at Madras must be members of the Indian Civil Service: as also, subject to certain exceptions which are noticed below, must all officers holding appointments of the following classes: (*a*) Secretaries to Government, except in the Public Works Department, (*b*) Members of, and Secretaries to, the Board of Revenue; (*c*) District and Sessions Judges and Additional Sessions Judges; and (*d*) Collectors and District Magistrates. These and a certain number of appointments of Sub-Collector are classed as "superior," the "inferior" appointments being regarded as posts in which officers are trained for positions of independent responsibility. The office of Commissioner of the Agency division is held by a senior Collector and District Magistrate. The cadre of the Indian Civil Service also provides for certain other appointments which are not reserved by statute, such as those of the Resident in Travancore and Cochin, the Commissioner of Coorg, the Registrar of Co-operative Societies, the Registrar of the High Court, the Private Secretary to His Excellency the Governor, one Deputy Commissioner of Salt and Abkāri and the Collector of the Civil and Military Station of Bangalore. The Director of Industries and the Provincial Superintendent of Census Operations are usually members of the Indian Civil Service. In special circumstances

G. of I. Act, s. 100

a person not belonging to the Indian Civil Service may be appointed to one of the posts reserved by statute for that service, but every such appointment must be reported to the Secretary of State with the special reasons for making it, and it is only provisional until it has been approved

G. of I. Act, s. 99

by the Secretary of State in Council. Statutory rules were framed however as far back as 1892 under which a certain number of appointments ordinarily so reserved were scheduled as thrown open to members of the Provincial Civil Service and other persons domiciled in India. In the first instance fifteen appointments were thus thrown open to the members of the then newly formed Provincial Civil Service, including two posts of Collector and District Magistrate, four of District and Sessions Judges, one of Secretary to the Board of Revenue and eight of lower rank which have since been assimilated to the corresponding grades of the Provincial Civil Service, i.e., the Deputy Collectors' cadre. Additions have subsequently been made to these "listed" appointments and there are now eleven superior appointments listed, including five in the executive service and six posts of District and Sessions Judge, of which two have recently been filled by direct nomination from the bar; while several "inferior" appointments such as those of Under Secretaries which were formerly held by members of the Indian Civil Service are now filled otherwise.

Other Imperial Services

95. Besides the Indian Civil Service, the Imperial Service of the Public Works Department is now included in the Indian Service of Engineers, which is divided into two branches, consisting of officers recruited in Europe and in India. All appointments to the Indian Service of Engineers are made by the Secretary of State. Appointments to the Europe-recruited branch are made on the advice of a selection committee including at least one eminent representative of the engineering profession. Candidates for this branch must produce evidence that they have obtained one of the University degrees prescribed by the Secretary of State or that they have passed sections A and B of the A.M.I.C.E. examination, or obtained such other diploma or distinction in engineering or general and technical (theoretical and practical) education as the Secretary of State may decide to accept in any particular case. Appointments to the India-recruited branch are made from two sources—graduates of the College of

Engineering, Madras, and selected officers of the Provincial Engineering Service. Officers for the Indian Police Service are recruited by competitive examination in England, and in India on the nomination of a selection committee, followed by a competitive examination among the nominees. Officers for the Imperial Agricultural Service are recruited in England and in India on the advice of a selection committee. Special qualifications of a practical and scientific nature are essential both for administrative and for research and instructional posts. Officers for the Imperial Veterinary Service are appointed by the Secretary of State. They must hold a diploma of the Royal College of Veterinary Surgeons. Officers of the Imperial Forest Service are recruited both in England and in India on the advice of a selection committee and are required to pass through the forestry course at one of the Universities of Oxford, Cambridge or Edinburgh.

Educational qualifications for admission to the Public Service

96. Admission to Government service in this Presidency is not as a rule dependent on success in a competitive examination, but no person can in general be appointed to a post, the sanctioned pay of which is Rs. 35 per mensem in the mufassal or Rs. 40 per mensem in the Madras City or more unless he possesses the minimum educational qualifications laid down. Various examinations—public or departmental—are also prescribed for particular posts in each department. Detailed information on this subject will be found in paragraph 606 of chapter VII.

The Secretariat

97. There are eight Secretaries to Government, each of whom has ordinarily an Under Secretary and one or more Assistant Secretaries, though the exact arrangements differ in different departments; and at times of pressure a Deputy Secretary may be appointed to assist any one of them. The Chief Secretary deals with the correspondence relating to the Public, Judicial, Political and Ecclesiastical departments; the Secretary to Government, Revenue Department, with the administration of the Land Revenue, the Agency tracts and the Laccadives, the Court of Wards and Zamindars, Excise and Stamps; the Secretary in the Law Department, with Civil Justice, Emigration, the Depressed Classes, Jails, Labour, Legislation, Education and Registration; the Finance Secretary, besides Finance, with Pensions, and Central subjects, viz., Archæology and Epigraphy, Customs, Income-tax, Marine, Meteorology, Opium, Post Office and Salt; the Secretary in the Development Department, with Agriculture, Co-operation, Forests, Factories, Industries, Fisheries and Veterinary; and the Secretary to Government, Local Self-Government, with matters concerning Local Boards, Municipal Councils, the Medical Department, Public Health, Religious and Charitable Endowments, Tramways and Town-planning. Of the two Secretaries to Government, Public Works Department, one deals with Irrigation and the other with all other Government public works except Railways, with regard to which the Senior Government Inspector of Railways occupies the position of Secretary to Government.

Political

98. One officer is appointed as Resident of the two Indian States of Travancore and Cochin; he has under him an Assistant Resident. The Collectors of Trichinopoly, Bellary and Kurnool are ex-officio Political Agents for the Indian States of Pudukkōttai, Sāndūr and Banganapalle, respectively, and the Collectors of South Arcot, Tanjore, Malabar and Gōdāvari are ex-officio Political Agents for the French Settlements of Pondicherry, Karikal, Mahē and Yanam. A consul is appointed for Pondicherry and Karikal. The Collector of Madras is ex-officio Paymaster of Carnatic Stipends and in that capacity is under the Political Department of the Government. Officers in the service of Government are occasionally employed in the Indian States with the sanction of the Government.

Administration of the land

99. For purposes of general administration the Presidency, excluding the Agency tracts which have been constituted into a separate Agency division, is divided into 26 districts under the executive administration of a District Collector and Magistrate, who is generally a member of the Indian Civil Service. The Agency division is under the executive

administration of the Agency Commissioner who is also a member of the Indian Civil Service; the Agency Commissioner corresponds with the Government direct. The Agency division and each district, with the exception of Madras and Anjengo, contain two or more divisions or sub-divisions; a division or sub-division again comprises one or more taluks, each of which is under the jurisdiction of a Tahsildar. Further details regarding the civil divisions of the Presidency will be found in paragraphs 233 to 252. Some of the Divisional Officers are members of the Indian Civil Service; the majority are, however, Deputy Collectors who are members of the Provincial Civil Service. The Collectors as Revenue Officers are subject directly to the control of the Board of Revenue which consists of three senior officers of the Revenue Department, usually members of the Indian Civil Service. There are no officers corresponding to Commissioners of Divisions in other provinces who have charge of a number of districts. The revenue jurisdiction of each member of the Board of Revenue extends over the whole Presidency and the work of the Board is distributed among the members under Madras Act I of 1894. But orders on important matters are passed by the full Board. Two members of the Board are Commissioners of Land Revenue; and one of these is also Commissioner of Revenue Settlement; the third is Commissioner of Salt, Abkāri and Separate Revenue and Inam Commissioner. Under the Commissioner of Land Revenue and Settlement are the Director of Survey, five Settlement Officers in charge of Settlement Parties and thirteen Special Assistant Settlement Officers. The Land Revenue and Settlement offices of the Board which were till recently separate have been amalgamated into one and the combined office is in charge of a Secretary, a member of the Indian Civil Service, who is assisted by two Assistant Secretaries, both of whom belong to the Provincial Service.

The Board of Revenue

The Court of Wards

Madras Act I of 1902

100. The Board of Revenue is the Court of Wards; the Court is subject to the Local Government, and exercises its powers locally through the District Collector. A proprietor, that is, a person who owns or has a life interest in land either solely or as a co-sharer, is deemed to be disqualified for the management of his property if he is a minor, or is a woman declared by the Local Government to be incapable of managing her property, or has been adjudged by a competent civil court to be of unsound mind and incapable of managing his property, or has been declared by the Local Government to be incapable of managing his property owing to any physical or mental defect or infirmity. A proprietor *sui juris* may on his own application have his estate taken under the management of the Court, if the Government deem it to be in the public interest that it should be so managed. The Court may take under its superintendence the person or the property of a disqualified proprietor, or both, or the property of a proprietor who has applied to have his property placed under the superintendence of the Court. When the Court assumes the superintendence of a ward's property, the District Collector takes possession of the property on behalf of the Court. In the case of an encumbered estate, if the property is in the possession of a mortgagee or of any persons claiming under a mortgage, the Local Government may, in certain circumstances require the encumbrancer to deliver up possession of the estate to the manager appointed by the Court. The Court may also in certain circumstances retain management after the proprietor's disqualification has ceased until it is satisfied that he will be thereafter competent to take charge of his estate and administer his own affairs.

Scheduled districts

101. The administration of the scheduled districts now comprised in the Agency division differs considerably from that of the remainder of the Presidency. The administration of civil justice in these tracts as well as that of criminal justice and the collection and superintendence of the revenue is vested in the Agency Commissioner. Many legal enactments, which are in force elsewhere, have not been extended to the scheduled districts. The Agency tracts have been declared to be a "backward tract" under section 52-A of the Government of India Act. Under this section the Governor-General in Council may by notification direct that any Act of the Indian legislature shall not apply to the territories in

question or shall apply subject to such exceptions or modifications as the Governor-General thinks fit, or he may authorize the Governor in Council to give similar directions in respect of any Act of the local legislature.

Administration of Criminal Law

Criminal Courts

The High Court

24 & 25 Vic., c., 104, s. 2

102. The superior court for civil and criminal judicial work is the High Court at Madras. The High Court may consist of a Chief Justice and as many Judges, not exceeding 20, as His Majesty may from time to time think fit and appoint. At present, in addition to the Chief Justice, there are 11 puisne judges. The judges must be barristers of five years' standing or members of the Indian Civil Service of ten years' standing, who have exercised the powers of a District Judge or like powers for at least three years, or persons who have held judicial office not inferior to that of a subordinate judge or a Judge of a Small Cause Court for five years or pleaders of the High Court of ten years' standing ; one-third of the Judges, including the Chief Justice, must be barristers and one-third must be members of the Indian Civil Service. A judge holds office during His Majesty's pleasure but has power to resign. The Governor in Council may make temporary arrangements if a vacancy occurs in the High Court. A High Court Bench may consist of one or more judges, a Full Bench being a bench of not less than three of the judges for the time being present as judges of the Court. The High Court has framed rules showing what class of work may be disposed of by the various Benches ; certain matters may be disposed of by a judge in Chambers. A list showing the sittings of the various courts during the following week is published every Friday. For the administration of criminal justice there are 25 Sessions Judges in the mufassal, the High Court being the Sessions Court in the Presidency town. Additional and Assistant Sessions Judges are sometimes appointed to assist courts in which the work is heavy. Sessions are held once a month at the headquarters of each judge, but once a quarter in the High Court. Magistrates are of three classes—first, second and third. The powers of a first-class magistrate are more extensive than those of a second-class magistrate ; for instance, a first-class magistrate can pass a sentence of imprisonment for two years, while the longest terms for which second and third-class magistrates can pass sentences of imprisonment are six months and one month respectively. Village magistrates are not included in these three classes of magistrates ; they may try persons charged with petty thefts when the value of the property stolen does not exceed one rupee and certain other cases of a trivial nature ; they may sentence such persons if found guilty to be confined in the village choultry for a time not exceeding twelve hours. The Collector is always District Magistrate except in the Presidency town, where there are three stipendiary magistrates (including the Chief Presidency Magistrate). There are also four benches of Honorary Presidency Magistrates for the trial of petty cases. Divisional Officers are also Subdivisional Magistrates. These magistrates generally exercise all the powers of a first-class magistrate as well as certain other special powers. The bulk of the magisterial work, as far as the trial of original cases is concerned, is disposed of by second-class magistrates. In taluks where the work is light the Tahsildar and Sarishtadar—the head of the taluk office under the Tahsildar—exercise the powers of magistrates including the power to try cases and to commit accused persons for trial before the Sessions Court, but in other taluks Stationary Sub-Magistrates are appointed for this purpose. Tahsildars are magistrates of the second class ex-officio and deputy tahsildars and sub-magistrates and taluk sarishtadars are magistrates of the third class ex-officio. In important mufassal stations, retired Government officers with judicial experience are appointed Honorary Magistrates and exercise the ordinary and certain special powers of stipendiary first-class magistrates. Benches of magistrates are sometimes appointed in mufassal municipalities and other mufassal towns and villages with powers to try regularly cases under certain special laws, and with summary powers to dispose of certain other classes of petty cases. Special third-class magistrates, chiefly

Sessions Courts

Magistrates

India Act V of 1898

Reg. XI of 1816

Reg. IV of 1821

Presidency magistrates

Honorary magistrates

selected from among sub-registrars, are appointed to try such petty cases in mufassal towns and villages not within easy reach of a regular magistrate's court. District Magistrates rarely take cases on their own file. Divisional Magistrates dispose of cases triable by a first-class but not by a second-class magistrate and of other cases which are of special importance for any reason or in which it is probable that a heavier sentence should be awarded than a subordinate magistrate is competent to pronounce in view of the previous history of the accused or of the value of the property stolen, etc. The District and Divisional Magistrates closely supervise the work of subordinate magistrates. The judgments of Divisional Magistrates are perused by District Magistrates and Sessions Judges. District Magistrates and Sessions Judges transmit to the High Court copies of their judgments in certain cases. In three cantonments in the Presidency the station staff officers are appointed magistrates of the third class and also cantonment magistrates under the Cantonment Act to try petty cases including breaches of cantonment rules.

Cantonment magistrates

Police

103. The head of the Police Department is the Inspector-General. The Presidency is divided into four ranges, each of which is under a Deputy Inspector-General of Police. A Superintendent of Police is stationed at the headquarters of each district and in most districts there are Assistant Superintendents or Deputy Superintendents, who are subordinate to the Superintendent and have either distinct local charges or are employed as Personal Assistants to the Superintendent. The superior service is divided into two kinds—Indian (Imperial) and Madras (Provincial). Recruitment for the former is, as a rule, made both in England and in India, on the results of competitive examinations, open to European British subjects and to such Indians as are admitted by the Secretary of State in exceptional circumstances and to statutory natives of India respectively. Recruitment for the latter (Madras Police) is made partly by the promotion of Inspectors and partly by direct appointment. Under them are the Inspectors, the sub-inspectors and the subordinate police establishment. The railways form two separate districts for the purposes of the Police Department, a special force known as Railway Police being employed under two Superintendents for the detection of offences within the railway limits and for the maintenance of order at railway stations. A Criminal Investigation Department is constituted to deal with crime of a special character and criminal organizations of more than local importance. To enable old offenders to be recognized, the finger-prints of all convicts are taken and sent to the Finger-Print Bureau at Madras. The Railway Police, the Criminal Investigation Department and the Finger-Print Bureau are under the control of a separate Deputy Inspector-General. A Provincial Training School has been established at Vellore for the training of probationary Assistant and Deputy Superintendents, Inspectors and sub-inspectors. Central recruits' schools for the training of the constabulary have also been established at Vellore, Vizianagram, Coimbatore and Anantapur. The magistracy exercise a limited control over the work of the police, but have no power to inflict departmental punishments or to interfere directly in the internal administration of the department. The Madras City Police force is controlled by a Commissioner assisted by two Deputy Commissioners and two Assistant Commissioners. The Commissioner is subject to a limited control by the Inspector-General. In each village one or more village watchmen or talaiyaris are employed; they are under the orders of the village magistrates and are appointed by Divisional Officers; they are not ordinarily under the control of officers of the Police Department, but the Local Government may allow the powers of punishing them usually vested in a Divisional Officer to be exercised by a Superintendent or Assistant Superintendent of Police in a specified area. Among other duties, they have to patrol the village at night, to carry the village magistrate's reports regarding crime and criminals to the nearest police station and sub-magistrate, to watch the cattle pounds and to assist in tracing offenders and detecting crime; they have no uniform,

Madras Act III of 1888

Village Police

Madras Act III of 1895, s. 26

but in some districts they are supplied with badges of office. In special localities ghât talaiyaris, enlisted and controlled by the Police Department, are employed to supplement the police in guarding roads. Such additional police are commonly spoken of as punitive police.

Punitive police

104. The Inspector-General of Prisons controls the Jail Department. There are ten central jails (nine permanent and one temporary) and four district jails. The temporary jail was opened to ease the pressure in existing jails caused by the influx of Mâppilla prisoners due to the Mâppilla rebellion. There are also two special jails—the Borstal Institution, Tanjore, for the confinement of prisoners of ages between 15 and 23, and the Civil Jail, Madras, for civil prisoners admitted within the City of Madras. Central jails are those in which prisoners sentenced to rigorous imprisonment for one year and upwards and prisoners sentenced to transportation are confined ; they also serve the purpose of district jails for the districts in which they are situated. Two central jails, one for the Tamil and the other for the Telugu districts, have been set apart for the confinement of habitual offenders. Each of the central and district jails (except one of the latter class which is managed by the District Medical Officer) is under the charge of a Superintendent. The appointment of Inspector-General of Prisons and four superintendentships of central jails are reserved for commissioned medical officers of the Indian Medical Service. The Surgeon-General, the Director of Public Health, the Deputy Director of Public Health, all Presidency Magistrates, the Commissioner of Police, Sessions Judges, District Magistrates, Subdivisional Magistrates and Inspectors of Schools are ex-officio visitors of jails within their jurisdiction. Non-official visitors are appointed by the Government for the jails in the City of Madras and by District Magistrates for the mufassal jails. Remissions of sentence are granted for good conduct and diligence, the days gained being liable to forfeiture for prison offences. A diligent and well-behaved convict may ordinarily earn three days' remission in a month. Selected casual convicts may be employed as night watchmen, overseers and convict warders ; they earn money gratuities and are granted special remission and other privileges. Elementary education is imparted in all jails to prisoners under 30 years of age by a paid teaching staff. Lectures on moral and religious subjects are delivered by honorary lecturers and on sanitary matters by the medical subordinates attached to jails. Technical instruction is given to convicts employed in the various industrial departments to enable them to earn their livelihood on release. Each jail is provided with a library and the prisoners are given facilities for reading and study. Recreation is provided for well-behaved prisoners in association wards between lock-up and sleeping time. A Central Discharged Prisoners' Aid Society has been organized at Madras and several district committees have been formed at various centres. At the headquarters of each sub-magistrate is a subsidiary jail, in which remanded or undertrial prisoners and convicts sentenced to imprisonment for not more than one month are generally confined ; these subsidiary jails are superintended by sub-magistrates and inspected periodically by District and Subdivisional Magistrates and by District Medical Officers. There is a Reformatory School at Chingleput for the reception of juvenile offenders under the age of 15 years.

Prisons *India Act IX of 1894*

105. The administration of civil justice is carried on by 24 District Judges, 29 Subordinate Judges, two special Small Cause Judges and 144 District Munsifs. In addition there are at present on a temporary basis one District Judge, 19 Subordinate Judges, one Small Cause Judge and 23 District Munsifs. In the Presidency town there are a City Civil Court consisting of one Judge and Small Cause Court consisting of a Chief Judge and two other judges. The heads of villages may be appointed village munsifs, with power to hear petty suits of a value not exceeding Rs. 50 (or, with the written consent of both parties, Rs. 200) ; or, alternatively, a panchayat court with similar powers may be constituted, in which case the village munsif ceases to exercise jurisdiction. Offices

Administration of Civil Law

Civil Courts

Registration

India Act XVI of 1908

for the registration of documents have been established at convenient centres throughout the Presidency which for this purpose is divided into districts and sub-districts. The latter are under sub-registrars of whom there are 578, including 7 officers working as clerks in the Inspector-General's office, 5 temporary and 5 ex-officio officers. Excluding the temporary and ex-officio officers the remaining 568 officers are divided into two grades, a lower and an upper, on time-scales of pay. The upper grade consists of 113 officers and the lower of 455. The districts are presided over by District Registrars, 32 in number, also on a time-scale of pay. This number includes the three appointments of Personal Assistant to the Inspector-General of Registration, Inspector of Registration Offices and Assistant to the Registrar of Joint Stock Companies. The head of the department is the Inspector-General of Registration, who is also ex-officio Registrar of Joint Stock Companies and Registrar-General of Births, Deaths and Marriages. The Assistant to the Registrar of Joint Stock Companies is the Assistant Registrar of Joint Stock Companies for the Madras City and ex-officio Registrar of Provident Insurance Societies and Life Assurance Companies. All District Registrars are ex-officio Assistant Registrars of Joint Stock Companies within their jurisdiction. All registering officers are Registrars of Births and Deaths under the Births, Deaths and Marriages Registration Act, 1886. One hundred and ninety-five officers are also notaries public. Several of them exercise magisterial powers of the third class for the trial of offences punishable under the local laws and some of them are members of local bodies. Sub-Registrars stationed at the headquarters of deputy tahsildars are placed in charge of the sub-treasury during the absence of the deputy tahsildar on tour. At taluk stations, they are in charge of the double lock chests during the absence of the Tahsildar on tour if there is no sub-magistrate at the station, or when both the Tahsildar and the sub-magistrate are absent on duty simultaneously.

Local boards

Madras Act XIV of 1920

106. A district board has been formed for every district and one for the Agency Division. Taluk boards exist in all districts except the Nilgiris and the Agency Division. Union boards have been established in areas which though more or less urban are not yet fit to become Municipalities. The area under a district board is ordinarily the revenue district excluding all municipalities, while that under a taluk board is usually coterminous with a revenue divisional charge, but in some districts, taluk boards have been constituted for single revenue taluks. The Madras Local Boards Act, 1920, gives each class of local board (district, taluk and union) an independent status and distinguishes their funds and functions. Not less than three-fourths of the members should be elected; the president of a union board should invariably be elected; the president of a taluk board should be elected unless the Government otherwise direct; and the president of a district board may be appointed or elected at the discretion of the Government. The privilege of electing their presidents has been conceded to two district boards; and official presidents have been replaced by non-official presidents in all districts but the Nilgiris. The Revenue Divisional Officer is no longer an ex-officio member of the district board or the ex-officio president of the taluk board and the privilege of electing its president has been conceded to all except 14 taluk boards. The total number of members of a district board is subject to a maximum of 52 and a minimum of 24. The president of every taluk board in the district is an ex-officio member of the district board. One-fourth of the members of the district board are appointed by Government and the rest are elected by the taluk boards in all districts except in the Nilgiris, where the two planters' associations and the tax-payers and inhabitants of the district elect the members. The total number of members of a taluk board is subject to a maximum of 24 and a minimum of 12. Three-fourths of the total number of members of taluk boards are elected by the tax-payers and inhabitants of the taluk, and the rest are appointed by the presidents of district boards. The qualifications of voters have been considerably lowered and women are no longer debarred from voting or

District boards

Taluk boards

from standing as candidates at elections. Presidents, vice-presidents and members of local boards do not ordinarily receive any remuneration but they may be paid their travelling expenses. Presidents are responsible for seeing that the resolutions of their boards are carried into effect. Under the Madras Local Boards Act, 1920, no village can be constituted into a union unless it has a population of 5,000. The total number of members of a union board is subject to a maximum of 15 and a minimum of 7. Three-fourths of the members are elected by the tax-payers and inhabitants of the union and the rest are appointed by the president of the taluk board. Union boards exist in all districts except the Nilgiris and South Kanara. The main source of income of district and taluk boards is a tax of one anna in the rupee on the annual rent value of all occupied lands in the district. The district board can levy an extra tax not exceeding 3 pies in the rupee on the annual rent value of occupied lands and the taluk board can levy another tax of three pies in the rupee. The levy of a railway cess has been abolished. The income of union boards is derived chiefly from a tax on houses. Local boards also derive an income from tolls and ferries, profession and companies taxes, pilgrim tax and fees for the use of markets, cart-stands and slaughter-houses. A consolidated budget of all the local boards in the district has to be submitted to the Government, but the local boards have a free hand in framing their budgets. Government cannot interfere in this matter unless a budget fails to provide for the due discharge of all liabilities in respect of loans or for the maintenance of a working balance. The main ordinary duties of local boards are the construction and maintenance of roads, bridges, avenues, hospitals, dispensaries, markets, water-works, wells, drains, latrines, the training of nurses, midwives and vaccinators, the supervision of sanitation and the diffusion of education. District and taluk boards employ engineering establishments for the construction and maintenance of public works vested in them or under their control; but the services of officers of the Public Works Department are occasionally utilized with the permission of Government for the execution of special works considered to be beyond the powers of the ordinary local fund staff. The District Collector, the Surgeon-General, the Director of Public Health and his assistants, the Sanitary Engineer and his deputies, the District Medical and Sanitary Officer, the Chief Engineer, the Superintending Engineer of the circle, the Director of Public Instruction and the Inspector of Schools may, with the permission of the president, address a local board on any matter affecting the general administration, sanitation, public works or public instruction.

Unions

107. The duties devolving on local boards are discharged in municipal areas by independent bodies styled municipal councils. Each council consists of not less than 16 and not more than 36 members. Under the Act the elective strength should not be less than three-fourths; the rest of the members are appointed by Government. The Revenue Divisional Officer is no longer an ex-officio member of the Council and official supervision has been largely relaxed. The property tax leviable on buildings and lands comprises a tax for general purposes and it may also comprise a water and drainage tax, a lighting tax and a railway tax. The rate of this tax is fixed by each council independently. Other sources of municipal income are a profession tax, tolls, taxes on vehicles and animals, a companies tax and in some cases a pilgrim tax. In hill stations a tax on private menial and domestic servants may in addition be levied. Unless a municipal council is indebted, it has a free hand as to the taxes to be levied and the rates at which they should be levied. The registration of births and deaths is compulsory in all municipalities and the vaccination of children is also obligatory. Some councils employ paid chairmen, while others have paid secretaries to assist their honorary chairmen. Every rate-payer is given a vote and is eligible for election to the council. Women can also vote at municipal elections but cannot at present stand as candidates at elections. They may, however, serve on special committees of the council.

Municipal Administration

District Municipalities

Madras Act V of 1920 (as amended by Madras Acts XII of 1920 and II & V of 1921)

108. The municipal affairs of the City of Madras are administered by a council and a Commissioner. The council consists of 50 councillors of

Corporation of Madras *Madras Act IV of 1919*

whom 30 are elected by the rate-payers and inhabitants of the 30 municipal divisions, three elected by the Madras Chamber of Commerce, three by the Madras Trades Association, two by the South Indian Chamber of Commerce, one by the Port Trust Board, one by the Anglo-Indian Association of Southern India, Limited, and one by the University of Madras. The remaining nine councillors are appointed by the Government. There are four standing committees, of seven members each, dealing with taxation and finance, works, health and education. The Commissioner, who is appointed by the Government, is a paid officer and is the head of the executive. He can attend meetings of the council or of any standing committee and take part in the discussion, but he has no right to move any resolution or to vote. At the first meeting after the first day of November in each year the council elects one of its number to be its president. The taxes leviable in the City of Madras are in general similar to those in the mufassal municipalities, but the Corporation levies also a tax on timber brought into the city and a duty on transfers of property in the shape of an additional stamp duty. The council can itself fix the rate at which the property tax is to be levied. The present rate is 18½ per cent of the annual value of buildings and land. The three principal officers of the municipal corporation are the Revenue Officer, the Health Officer and the Engineer who are appointed by the council subject to confirmation by the Government. A special engineer has also been appointed by the council with the approval of the Government to carry out the extensive water and drainage schemes now in hand. Subject to confirmation by the Government, the council has power, in the event of any unusual mortality or the prevalence of any dangerous disease within the city, to appoint a special health officer to investigate the causes thereof and to suggest remedies, and to appoint a special revenue officer for the purpose of carrying out a periodical revision of assessment, introducing a new tax or discharging any extraordinary duty connected with the revenue administration of the Corporation. But no necessity for either of these appointments has so far arisen.

Marine

109. The Marine Department includes the Presidency Port Officer and the Deputy Conservator of the Port of Madras, who are officers of the Royal Indian Marine, and 12 other Port officers, one of whom is Personal Assistant to the Presidency Port Officer and Agent for Government Consignments, Madras, while the others are stationed at minor ports. The port of Madras is under the control of a body of trustees constituted under the Madras Port Trust Act II of 1905.

Civil Veterinary Department

110. The Civil Veterinary Department has an executive and an educational branch. At the head of the executive branch is the Chief Superintendent, Civil Veterinary Department, who is a member of the Indian Civil Veterinary Department, with three superintendents and four deputy superintendents under him. The college is presided over by another member of the Indian Civil Veterinary Department under whom are a professor of pathology and bacteriology, a professor of surgery and other lecturers. The whole department works directly under the Ministry of Development.

Horticulture

111. Botanic gardens are maintained on the hills in immediate charge of the Curator of the Government Gardens and Parks, the Nilgiris, who works under the orders of the Director of Agriculture.

Cinchona and quinine

112. The Government have large cinchona plantations on the Nilgiris and a factory at Neduvattam for the manufacture of quinine. Quinine produced at the factory is supplied to the medical departments of Madras and Bombay and to hospitals and dispensaries throughout the Madras Presidency, and elsewhere in India. It is also sold to the public in packet form through the agency of post offices. The plantations and factory are under the Deputy Director of Agriculture (Cinchona).

Agricultural Department

113. The Director of Agriculture has two personal assistants, ten Deputy Directors including the Deputy Directors of Planting Districts and Live-stock, and nine Assistant Directors, in addition to the staff of the Agricultural College and Research Institute, Coimbatore, the staff of

which includes the Principal, an Assistant Principal, Government agricultural and lecturing chemists, economic and lecturing botanists, a mycologist, an entomologist, a bacteriologist, a cotton specialist, a millet specialist and an agricultural engineer.

Forests

114. The Forest Department, which is maintained for the conservation and exploitation of the Government forests, is controlled by the Chief Conservator of Forests. There are six Conservators of Forests for the Presidency with separate local charges. The controlling staff of the Forest Department consists of members of the Imperial Forest Service described in paragraph 95 above and the Provincial Forest Service. The strength of the Imperial service cadre is 61 while that of the Provincial service is 42. A certain percentage of posts in the Imperial service is reserved for the promotion of deserving provincial service officers. The Provincial Forest Service generally consists of men who have undergone training at the Imperial Forest College, Dehra Dun. It is partly filled by the promotion of efficient rangers. In each district, except Madras, Anjengo and Tanjore, is a District Forest Officer, who is an assistant to the Collector for forest purposes. Under the controlling staff are the executive staff consisting of rangers and the protective staff consisting of foresters and forest guards. Government may declare any land at their disposal to be reserved forest after due enquiry into, and the determination of, the claims of private persons thereto. An officer specially appointed to conduct such investigation is called a Forest Settlement Officer. Pending the completion of the enquiry, the land is declared to be reserved land and the accrual of any fresh private rights over it is barred. Grazing, cultivation, tree-felling, quarrying, hunting, shooting, etc., in reserved forests are prohibited by law, except under permits for which fees are usually charged; privileges are, however, granted in special cases to aboriginal tribes habitually dwelling in forests, and in times of famine grazing is permitted in reserved forests, free of charge. Conservation and exploitation are carried out in reserved lands in a lesser degree than in reserved forests. In some zamindaris in the Presidency, the conservation of the zamindars' forests is secured by rules modelled on those in force in Government reserved lands.

Madras Act V of 1882

Fisheries

115. The Fisheries Department is supervised by a Director of Fisheries who is assisted by three Assistant Directors and a small technical subordinate staff. The work of the department mainly consists of the improvement of the food supply of the people by developing both the marine and freshwater fisheries of the country, the introduction of new fishery industries and development of old ones and the improvement of the material and moral condition of the fishing community by introducing better methods and improved gear and by demonstrating to them the value of thrift, co-operation, education and temperance.

Public Works Department

116. The Public Works Department is responsible for the construction and maintenance of buildings belonging to Government (except certain buildings in charge of the Forest and Salt, Abkāri and Separate Revenue departments), navigable canals, and irrigation works which are ordinarily capable of irrigating more than two hundred acres of land; it does not as a rule maintain roads, though a few important roads are in its charge. At the head of the Public Works Department are two Chief Engineers, the senior of whom is the Secretary to Government and the junior Joint Secretary; one controls the general roads and buildings branch and the other the irrigation branch of the business of the Department. No railways in the Presidency are worked by the State, but the Government are kept in touch with the Railway administrations by the senior Government Inspector of Railways who, for this purpose, is also a Secretary to Government. The Presidency is divided into seven circles, over each of which there is a Superintending Engineer, who controls the district staff of executive and assistant executive engineers. These are employed both on irrigation and other public works. The superior officers belong to the Indian Service of Engineers and in addition a new provincial service was constituted in 1920 under the style of the " Madras Engineering Service " to include the bulk of

the officers required for the charge of permanent subdivisions and equivalent posts. There are, besides, specialist appointments, including the Sanitary Engineer to Government, the Consulting Architect and his assistant—and temporarily also a special Consulting Architect—the Electrical Inspector and the Electrical Engineer. A special Harbour Engineer was appointed in 1920 to advise the Government on important harbour works, but he and his staff were transferred in 1921 to the Marine Department. The Boiler Inspectors are under the control of the Public Works Department, which deals with questions relating to the working of the Steam Boilers and Prime-movers Act. The accounts of the department are audited by the Accountant-General. Payments are made by means of cheques drawn by officers on Government treasuries or the Imperial Bank of India, the expenditure being limited to the amount of budget allotments.

Audit Department

117. Under the Reforms, the audit of the transactions of both the Central and Provincial Governments is a central subject, while that of local funds is a provincial subject. The audit of the former is entrusted to the Accountant-General, who is an officer of the Government of India under the direct orders of the Auditor-General in India. The audit of local funds is conducted by the Examiner of Local Fund Accounts working under the administrative control of the Local Government. The Accountant-General is also ex-officio Deputy Controller of the Currency and is assisted by a currency officer of the rank of Assistant Accountant-General who is in immediate charge of the Currency office. In his capacity as Principal Audit Officer, the Accountant-General is assisted by two Deputy and three Assistant Accountants-General besides four Assistant Accounts Officers. One of the Deputies is in charge of the civil audit and the other in charge of the public works audit. Each year the Accountant-General reviews the result of the audit conducted by him during the past official year in his audit and appropriation reports which are transmitted, through the Auditor-General in India, to the Finance Department to be placed before the Committee on Public Accounts for scrutiny and report to the Legislative Council.

Salt, Abkāri and Separate Revenue

118. The manufacture and sale of salt and of intoxicating liquors and drugs including opium are controlled by the Salt, Abkāri and Separate Revenue Department. The head of the department is the Commissioner who is a Member of the Board of Revenue. There are three Deputy Commissioners, who have charge of the Northern, Southern and Central territorial divisions, and an Assistant Commissioner of Distilleries who is responsible for the supervision of distilleries. One Deputy Commissioner and the Secretary to the Commissioner are usually Members of the Indian Civil Service. There are 11 Assistant Commissioners and 85 Inspectors. The manufacture of salt is a Government monopoly and one of the principal duties of the officers of the department is the prevention of the unauthorized manufacture of salt. The factories are of two classes : in factories for the manufacture of salt for sale to Government, salt is manufactured by ryots who are paid for their salt by Government as soon as it is stored, and this salt is again sold by Government, normally at fixed rates and occasionally in public auction ; in factories for the manufacture of salt for general sale, private persons are permitted not only to carry on manufacture subject to the conditions of their licences but also to dispose of their salt at their own price and discretion. Salt which has been sold by Government, and salt which is the property of licensees or of purchasers from them, may not be removed from the factories until duty at the rate fixed by the Government of India has been paid.

Madras Act IV of 1889

Foreign Liquor

Madras Act I of 1886

119. The manufacture and the sale of any intoxicating liquor or drug except under due authority are prohibited by law. In the case of imported liquors, the duties leviable under the tariff for the time being in force are credited to Customs, and the excise revenue therefrom is derived only from licences for the privilege of vend. The right of vend in taverns licensed for the retail sale of liquor on and off the premises is sold in public auction ; in other cases, fixed fees are charged for licences. A

brewer must take out a licence and comply with certain rules ; duty, which is at present fixed at 8 annas per imperial gallon, must be paid once in a quarter on the total quantity of beer brewed during the quarter, less 5 per cent allowed for wastage.

Country spirit

120. The revenue derived from country spirit is levied partly by means of a still-head duty and partly by licence fees and the sale of the right of vend ; country spirit is arrack which is generally distilled from jaggery or molasses. Under the "contract distillery system," which is now in force throughout the whole Presidency with the exception of the major portion of the Agency division, where the central distillery and outstill systems are in force, the exclusive privilege of manufacture and supply of country spirits throughout a district or other specified area is disposed of by tender to approved individuals and firms. Tenderers are required to state at what rate over and above the still-head duty they are prepared to supply spirits of specified strengths from a central source of supply (distillery and warehouse) in each contract area. The successful tenderer has the monopoly of supply of liquor of his own manufacture to retail vendors within the area of his contract, at rates which are fixed by Government, and he must generally establish wholesale depôts at convenient places for this purpose ; he must also pay the still-head duty at the rate fixed by Government on all liquor so issued ; the duty, except in certain low-duty areas, varies from Rs. 6-14-0 to Rs. 8-7-0 per proof-gallon, except in Madras City and the Saidapet taluk of the Chingleput district where it is Rs. 10-10-0 per proof-gallon ; the annual fee for a licence to establish and maintain a distillery is Rs. 100 and licences for warehouses are issued free. If a distiller himself establishes a wholesale depôt, no fee is charged ; but to facilitate the supply of spirits to retail vendors in tracts which are not within easy reach of a distillery or a warehouse licences are issued at the instance of the contractor to persons who are not distillers, on payment of a fee of Rs. 15 for the wholesale vend of country spirits, the licensees being allowed to sell only to other wholesale depôt keepers and independent arrack shopkeepers in the districts or other tracts to which the licence applies. The manufacture is separated from the sale of liquor. The right of retail vend of country spirits is sold annually in public auction by separate shops. The rates of still-head duty are fixed by the Governor in Council and may vary from year to year. Liquor may be issued and sold only at certain specified strengths, viz., 35° or 60° under-proof, except in the low-duty area round Pondicherry in the South Arcot district and the Attapadi valley, where liquor of strength 40° under-proof may be sold.

Contract distillery system

Toddy

121. Unfermented or "sweet" toddy—the sap of a coconut, sago, palmyra, date or dadasal palm—is not subject to any taxation, but it must be drawn in pots freshly coated internally with lime or containing sufficient lime to prevent fermentation. Fermented toddy is taxed by means of rents payable for the right of retail vend and also, throughout the greater part of the Presidency, by means of the tree-tax system under which a fixed fee is charged for every tree, from which it is intended to draw fermented toddy. The right of retail vend is sold in public auction. Under the tree-tax system, no palm tree may be tapped for the purpose of producing fermented toddy without a licence, upon issue of which the tree is given a distinguishing mark. The fees for licences to tap coconut and sago palms are Rs. 4-8-0 and Rs. 9-0-0 a tree for each half-year and the fee for a licence to tap a palmyra or date palm is Rs. 3 a year in the major portion of the Presidency ; in some districts, fees are levied at five-sixths of these rates and in some at 25 per cent in excess of these rates. Special rates are in force in the Agency.

Tree-tax system

122. An excise licensing board has been appointed for the City of Madras with power to determine the number and location of shops for the sale of intoxicants of all kinds. In district municipalities and unions of an urban character special local committees are appointed to advise the Collectors in respect of the number and location of shops. In other areas,

the number and sites of shops are determined by the Collector in consultation with the District Superintendent of Police. Representations made by district or taluk boards, village panchayats and other public bodies are duly considered and weight is attached to local opinion and the opinion of persons specially interested, e.g., railway authorities and large employers of labour. Lists of shops proposed for any lease within the jurisdiction of municipal councils and district and taluk boards are placed before the body concerned three months before the date fixed for the auction sale and their views are taken into consideration. Instructions have been issued to Collectors that, as a rule, rural shops must not be located without permission within a furlong of a metalled road, that when shops on a road-side are sanctioned in rural areas the minimum distance between such shops should ordinarily be five miles, that sites selected should be so far public that persons entering shops do not escape observation but not so prominent as to compel attention and that, where possible, the shops should be located on Government land. The general rule is that shop licences are issued for a single year and the number and sites of shops are determined beforehand and are not altered except for very special reasons. Maximum numbers of shops to be opened in each district have been fixed according to requirements.

Opium

India Act I of 1878

123. The cultivation of the poppy is prohibited, and the whole of the opium required for the Presidency is supplied by the Government factory at Ghazipur and stocked in district treasuries in the first instance and thence distributed to taluk cutcherries. It is issued to licensed vendors from taluk cutcherries at a price fixed from time to time. Import of opium or intoxicating drugs other than those used for smoking is permitted only—

(*a*) in the case of imports by sea by licensed dealers in opium for medicinal purposes or by licensed chemists, or

(*b*) under special orders of the Board of Revenue to be obtained in each case.

The privilege of the retail vend of opium and of the manufacture and sale of intoxicating drugs (other than smoking preparations) prepared therefrom is sold in auction by shops.

Ganja, bhang charas

124. Licences for the cultivation of the hemp plant are issued only in the Bāpatla taluk of the Guntūr district and in the Pōlūr taluk of the North Arcot district; elsewhere, its cultivation is absolutely prohibited. In tracts where it is licensed, the cultivators are required to convey the produce to public storehouses whence removals are allowed only on pre-payment of excise duty at Rs. 20 per seer of ganja and Rs. 3 per seer of bhang. Licences for the vend of these intoxicating drugs are sold in public auction.

Income-tax

125. The assessment and collection of income-tax are controlled by the Income-Tax Department, the head of which is the Commissioner of Income-Tax. The income-tax work forms part of the ordinary duties of the officers of the Land Revenue Department, except in the City of Madras, where there is a special staff consisting of a Special Income-Tax Officer for assessing incomes between Rs. 10,000 and Rs. 50,000 and 9 Inspectors. There is a special staff in selected districts consisting of 7 Deputy Collectors, 43 Assistant Tahsildars and 4 Inspectors, with a special staff of accountants and clerks. A scheme for the creation of a self-contained Income-Tax Department in the Presidency was sanctioned during the year 1921-22 by the Government of India, and will be brought into force gradually. When it has been completely introduced, the department will become Imperial and will be controlled by the Commissioner with a superior staff of 4 Assistant Commissioners and 27 income-tax officers.

Stamps

126. The Collector of Madras is also Superintendent of Stamps and Stationery and has under him an Assistant Superintendent who is a Deputy Collector.

Customs

127. The sea and land customs establishments are controlled by the Collector of Customs, Madras; he is assisted by two Assistant Collectors

who are members of the Imperial Customs Service and eight inspectors who are borne on the cadre of the Salt, Abkāri and Customs Department.

Registration of Births and Deaths

128. The registration of births and deaths is compulsory in municipalities and may be made compulsory in rural areas by the Local Government under the Madras Registration of Births and Deaths Act (III of 1899); during the year 1921 this Act was in force in 2,726 towns and villages. In rural tracts the registers of births and deaths are maintained by railway station-masters or by headmen of villages according as the tracts are within or outside railway limits; where registration is not compulsory, the headman has to ascertain by careful enquiries the occurrence of births and deaths outside railway limits. The registers are inspected and checked by officers of the Land Revenue, Medical and Vaccination Departments and by chairmen of municipalities and unions; but the officer responsible for the compilation of statistics for the whole Presidency is the Director of Public Health.

Industries

129. The Department of Industries is maintained for the industrial advancement of the Presidency. The department aims at the direct encouragement of industries, including a large share in industrial research work; the provision of technical advice and assistance to industrialists, the examination of applications for special concessions and the grant of loans to industries; the collection and distribution of commercial and industrial intelligence; the conduct of special enquiries and industrial surveys; the holding of industrial exhibitions; pumping and boring work and the control of industrial and technical education. The department is supervised by a Director of Industries and he is assisted by technical experts, such as the leather expert, an industrial engineer, an industrial chemist, textile expert, an inspector of industrial schools and a deputy director. There are three Government Industrial Institutions under the Department—the Leather Trades Institute, the Trades School at Madras and the Industrial Institute at Madura. The first two institutions are at present on a temporary basis. The Madras School of Arts is also under the supervision of the Director. There are five demonstration factories owned and managed by the department: the Kerala Soap Institute at Calicut; the Fruit Preserving Institute at Coonoor; the Sugar-crushing station at Pallapalaiyam in the Coimbatore district; the Minor Industrial Laboratory and the Glue Factory at Madras.

Labour

130. A new Department of Labour was constituted in the year 1920 under a Commissioner of Labour who is an officer of the Indian Civil Service. This department deals with questions concerning the welfare of labourers and the depressed classes, the administration of the Factories Act, the management and control of criminal tribes settlements and the emigration of labour. In his administration of the Factories Act, the Commissioner of Labour is assisted by one Chief Inspector, three Inspectors and one Assistant Inspector.

Co-operation

131. The Co-operative Department is in charge of a Civilian Registrar who is assisted by twenty-two section officers styled Assistant Registrars. A number of gentlemen in the various districts lend their services to the department in an honorary capacity.

Medical relief, Sanitation and Vaccination

132. The higher appointments in the Medical Department are usually held by commissioned officers of the Indian Medical Service. The head of the department is the Surgeon-General with the Government, who also superintends the Medical College, Madras, and the medical schools at Rayapuram, Tanjore, Vizagapatam, Calicut and Madura. The branch of the department which deals with sanitation, vaccination and epidemics is superintended by the Director of Public Health and his assistants. The Government maintain all the important hospitals in Madras City and all the district headquarter' hospitals. The staff of the General Hospital includes three surgeons, four physicians and a resident medical officer; one of the surgeons or physicians is also the superintendent of the hospital and draws an extra allowance on that account, and all the seven are usually professors of the college; one of the professors of the college is

also Principal and draws an extra allowance. The professor of chemistry is also the Chemical Examiner to Government. Four medical officers are stationed in Madras town which is divided into four departmental districts ; the Presidency Surgeon, First District, is Inspector of Emigrants and Superintendent of the Medical School, Rayapuram. A District Medical and Sanitary Officer is stationed at the headquarters of each mufassal district and Civil Surgeons are stationed in seven other towns. The District Medical and Sanitary Officers, Tanjore, Vizagapatam, Malabar and Madura, are also the superintendents of the medical schools in the respective districts. Medical officers receive special fees for the inspections of vessels. Lunatic asylums are maintained by the Government at Madras, Calicut and Vizagapatam. There is a separate superintendent for the asylum at Madras, but at Calicut and Vizagapatam the District Medical and Sanitary Officer and the Medical Superintendent of the Central Jail, respectively, are the superintendents. A leper hospital is maintained by Government at Madras in charge of an assistant surgeon working under the control of the Presidency Surgeon, First District. The Public Health Board advises local boards, municipal councils and the Government itself on all matters of public health administration; a sanitary engineer is employed to investigate and report on sanitary projects. The salaries of officers in the subordinate grades, including sub-assistant surgeons, vaccinators and sanitary inspectors, are paid wholly or mainly by local boards and municipal councils who maintain hospitals and dispensaries throughout the Presidency. Deputy Inspectors of Vaccination are paid wholly by Government.

Scientific Departments

133. Appointments in connexion with science include the Superintendent, Government Central Museum, who is also Librarian of the Connemara Public Library, the Superintendent, Archæological Survey, and the Assistant Archæological Superintendent for Epigraphy for the Madras Presidency, the last two of whom have, under the reforms, become officers of the Imperial Department.

Education and Ecclesiastical administration

134. The system of public instruction and the ecclesiastical jurisdiction are fully dealt with in Chapters VII and IX.

Stationery and Printing

135. The supply of stationery to all Government offices is controlled by the Superintendent of Stationery whose duties are performed by the Collector of Madras. In his capacity of Superintendent of Stationery he is under the direct control of the Finance Department of Government. The printing work for Government is done at the Government Press at the Mint Buildings and at its branches at the Penitentiary and Mount Road, Madras, and at Ootacamund. The Superintendent of the Government Press controls this department. There is at present only one district press, viz., the Ganjām District Press, the work of the other district presses being now done at the Government Press, Madras.

The Collector and District Magistrate

136. The duties of the Agency Commissioner and of the Collector and Magistrate of a district are as follows. As District Magistrate he is primarily responsible for the maintenance of law and order and for the administration of criminal justice by the magistracy within his jurisdiction and for the proper working of the police. As Collector he is the official head of his district, and it is his duty to see that land revenue, ~~income-tax~~ and revenue derived from forests and abkāri or excise are duly collected and he is officially responsible for all public money lodged in the district and subordinate treasuries. The maintenance of the numerous land records by the village officials, the state of the crops, the economic condition of the people and the grant of remissions of land revenue, when necessary or expedient, demand his constant attention. The forests in his district are under his control and management. He has under him an engineering establishment for the up-keep of the tanks and other irrigation works which have not sufficient capacity for the irrigation of more than 200 acres of land. He is responsible for the due assessment of all persons in the district whose incomes are such as to render them liable to

pay income-tax. He fixes the number and sites of shops for the sale of intoxicating liquors and drugs (1) in municipal areas, in consultation with local committees appointed for the purpose, and (2) in other areas, in consultation with the District Superintendent of Police; and it rests with him to accept or to reject the bids offered for the rights of vend in such shops or tracts at the annual auctions which are held by his Divisional Officers. In zamindari tracts his Divisional Officers decide suits and generally regulate the relations between landholders and ryots under the Estates Land Act, I of 1908. The Agency Commissioner is ex-officio President of the Agency District Board and as such is largely responsible for the maintenance of roads, the spread of education, the establishment of hospitals and dispensaries, and for sanitation, vaccination and the public health within his division. He has powers of control over taluk boards. The Collector is also called on to deal with such emergencies as famine—of the approach of which it is his duty to warn the Government—plague, cholera and the movements of troops. In some cases he holds also other appointments such as Political Agent to a Native State, etc. His duties necessitate frequent tours of inspection during all seasons of the year. Many of the Collector's powers and much of his patronage are exercised by his subordinates and much of his time is occupied with the disposal of appeals preferred against the orders of his Divisional Officers. A Divisional Officer who, if a member of the Indian Civil Service, is a Sub-Collector and Joint Magistrate and if a member of the Provincial Service, is a Deputy Collector and Magistrate, exercises within his division most of the ordinary powers of a Collector, but, with a few exceptions, an appeal lies to the District Collector against his orders. The powers and patronage of a Divisional Officer of not less than six years' service are somewhat larger than those of other Divisional Officers. In the Agency division, the Divisional Officer is ex-officio President of the Taluk Board and a member of the District Board. The Tahsildar is the chief revenue officer of the taluk which is divided for revenue purposes into ranges or firkas, usually three or four in number; the officer in charge of a range is called a revenue inspector.

The Divisional Officer

137. The lowest unit for administrative purposes is the village. In each village is a headman, sometimes called the patel or reddi or monigar or munsif, an accountant, who is generally called the karnam, and a staff of menial servants. These officers, who used to receive no remuneration in money but held certain lands on favourable terms, are now given fixed salaries, the pay of a headman varying from Rs. 8 to Rs. 50 and that of the accountant from Rs. 8 to Rs. 25. In some districts these offices are hereditary, but hereditary considerations may be neglected if the candidate for the office of headman or karnam is not educationally or otherwise fit to hold office. The headman is responsible for the collection of revenue and its remittance to the taluk treasury; in his capacity of village magistrate he can try petty cases and must maintain law and order in his village, applying for assistance to higher authorities if necessary and reporting the occurrence of crimes, the movements of criminal gangs, etc., to them; as village munsif he is a petty civil court; he is registrar of births and deaths; and it is generally his duty to see that water is duly distributed to irrigable lands from Government tanks, etc. As the immediate representative of the Government he has numerous other duties. The accountant is responsible for the maintenance and custody of the accounts and land records relating to the village. During the cultivation season he has to record the crop raised in each field, and the area in which it is raised and an estimate of its outturn. He is required to have an elementary knowledge of surveying, sufficient to enable him to survey and plot an ordinary field. He acts as clerk to the headman in his judicial capacity.

The village officer

CHARACTER OF LAND TENURES

Introduction

138. The following are the main varieties of land tenure under the Government :—(i) perpetual freeholds held under a title-deed showing proprietorship as against the Government, and paying no land revenue ; (ii) enfranchised inams or grants of land or of the land revenue thereon held under a title-deed showing proprietorship as against the Government, and paying a quit-rent fixed for ever, calculated at a favourable rate ; (iii) zamindaris or landed estates held under a sanad or title-deed showing proprietorship as against the Government, and paying a land revenue or peshkash fixed in perpetuity ; (iv) unsettled palaiyams or landed estates held without sanads, the land revenue on which may be raised at the pleasure of the Government ; (v) individual holdings under what is termed *ryotwari tenure* without a sanad expressly declaring proprietorship, and paying a revenue subject to additions and deductions in certain special circumstances and subject to revision at intervals of thirty years ; (vi) inam holdings including *jagirs*, or grants of land or of land revenue held under a tenure dependent on the fulfilment of certain conditions ; (vii) land held on special conditions as (*a*) on improvement leases called *cowles* and (*b*) under the favourable rules for planting *topes* or groves of trees.

Perpetual freeholds

139. The perpetual freeholds now existing were created under the rules for the redemption of land revenue and quit-rent on enfranchised inams under the rules in force during the latter half of the last century. Under these rules the redemption of land revenue was permitted in the case of (1) sites of buildings, (2) gardens of limited extent attached thereto, and (3) hill plantations of exotic products, such as tea, coffee, cinchona, etc. The rate of redemption was first fixed at twenty-five times the annual land revenue but, in 1895, it was raised to twenty-nine times such sum. In zamindaris, the registered zamindar alone was given the right to redeem the land revenue. In the case of ryotwari lands, the ryot holding directly from the Government alone had the right. On payment of the redemption money in full, with the cost of survey and demarcation, the party redeeming the revenue was furnished with a title-deed in a certain prescribed form. The redemption of quit-rent on enfranchised inams introduces the question of the inam tenures of this Presidency, but it is only necessary here to mention that inamdars holding lands enfranchised from service or from resumption by Government, but subject nevertheless to a quit-rent, were allowed to redeem that quit-rent in perpetuity. In the case of the inam title-deeds issued before the 28th February 1895, the sum payable for the redemption of quit-rent was fixed at twenty times the amount, but in the deeds issued after that date, it was stipulated that the quit-rent should be redeemed by thirty years' purchase. Having regard to the disadvantages arising from the capitalization of the State's annual revenue from land, Government decided in 1896 that the redemption of land revenue should be disallowed except in cases in which they had already pledged themselves to allow it. No absolute freeholds can therefore now be newly acquired in this Presidency. The holders of freeholds have unlimited powers of alienation. The freehold is absolute only against that demand of the Government which represents the Government's right to share the produce and gives no immunity from other Government demands, such as for irrigation, roads, sanitation, education and so forth ; in all of which cases the land may be subjected to separate cesses or demands. The redemption in no way affects sub-tenures, rights of occupancy, or other similar rights ; and the freedom conferred is absolute only against the Government.

Inams enfranchised, but unredeemed

140. Holders of enfranchised inams, who at the time of enfranchisement were granted the option of redeeming at any time the quit-rent payable on their lands, but have not availed themselves of the concession,

have full power of alienation and pay quit-rent, but such quit-rent is not liable to periodical revision.

Zamindaris

141. In the case of zamindaris, the land has been assigned in perpetuity with a proprietary title as against the Government. The land revenue, technically called "peshkash," is a charge on the land. Zamindars hold under a deed termed a "sanad-i-milkiyat-i-istimrar" and give in exchange a corresponding kabuliyat or acceptance. Act II of 1904 declares certain estates to be impartible and also inalienable beyond the life-time of their proprietors except in circumstances which entitle the managing member of a joint Hindu family, not being the father or grandfather of the other co-parceners, to make an alienation of the joint property binding on the shares of the other co-parceners independently of their consent. The alienation of an impartible estate beyond the life-time of its proprietor for the payment of land revenue due to Government is also prohibited unless the written consent of the Collector of the district in which the estate is situated is first obtained. In the case of zamindaris not brought within the scope of the Act, the proprietors are at liberty to transfer, without the previous consent of the Government, their right in the whole or part, however small, of their zamindaris to any person they please by sale, gift, or otherwise ; and such transfers are to be held valid and to be respected by the courts and officers of Government, provided that they are not repugnant to the Muhammadan or Hindu law or to the regulations of the British Government. In order to be valid against the Government, and in order to liberate the transferer from his liability to pay Government dues, such transactions must be first registered in the Collector's office and where the alienation is of a subdivision of the estate the peshkash on the subdivided portion must be determined by the Collector. The Government do not regulate the succession to zamindaris. The position of the cultivators in zamindari estates had not been clearly laid down under Act VIII of 1865. Generally the cultivators had occupancy rights and were bound to pay only rent to the landholder. Occupancy rights were, however, gradually trenched upon and in some estates claims were set up inconsistent with such rights. Fresh legislation thus became necessary. An Act (the Estates Land Act) was passed in 1908 repealing the provisions of Act VIII of 1865 and laying down the substantive rights of the landholders and the tenants and the procedure to be adopted in the collection of rents. The land being "permanently-settled," that is to say, the land revenue on it being fixed for ever, extension of cultivation brings no increase of revenue to the State. The fact that the zamindar has to pay a permanently-fixed revenue does not exempt him from liability to general, local and municipal taxes. Zamindars and persons registered as "proprietors" under the Limited Proprietors Act IV of 1911 have the power to appoint the village officers employed in the villages of the estate according to a scale approved by the Collector and the Board of Revenue : the power is, however, subject to the veto of the Revenue Officer in charge of the division. The power to punish village officers is vested in the Revenue Divisional Officer and the Collector, but zamindars and persons registered as "proprietors" under the Limited Proprietors Act IV of 1911 may, if specially empowered by the Board of Revenue, fine village officers in small amounts. About one-fifth of the whole Presidency is under zamindari tenure.

Palaiyams or unsettled estates

142. The palaiyams for which no sanads have been granted are called unsettled palaiyams. The important difference between unsettled palaiyams and zamindaris is that in the case of the former the Government have the power to resume the grant at pleasure or to alter or revise the conditions on which it is held, as, for example, by revising the amount of revenue paid by the holder.

Ryotwari tenure

143. The ryotwari system of holding under the Government has now been the principal tenure of this Presidency for over three-quarters of a century. The pattadar or registered holder of land under the ryotwari system is, as regards Government, the responsible proprietor of the land

entered against his name in the land register of the village, until it passes from his possession by sale for arrears of revenue or in some other legal manner. A registered pattadar may, so far as Government are concerned, alienate, in any manner he pleases, the whole or any portion of his holding, provided, (i) that unless and until such alienation is registered in the village records, the alienor remains liable for the revenue and all other legal charges due on the land just as if no such alienation had occurred, and (ii) that when the alienation is registered, the alienee takes the land subject to payment of any arrears of assessment or other legal charges due on it, and to the same obligations as those under which it was held by the alienor. If a registered pattadar improves his holding by constructing a tank on it or digging a well, he is not chargeable with any additional assessment for such improvements, but he is not entitled to claim, as of right, any reduction of assessment on account of space occupied by the work. He is bound to pay the assessment fixed on his field or holding, whether cultivated waste or fallow, in the prescribed instalments, unless it be remitted in accordance with the rules explained in paragraph 228. The assessment is determined under the rules described in paragraphs 212 to 223. The registered pattadar is entitled to work minerals on his land, but is liable to pay therefor a separate assessment in addition to the assessment above referred to which is for surface-cultivation.

Application for land

144. When there are assessed lands in a village unoccupied, it is open to any individual, whether resident of the village or not, to apply for the land to be held by him under the terms of the ryotwari tenure. Applications are published in the village with a view to give the "resident" ryots, i.e., ryots who live or own land in the village, an opportunity to take the lands applied for. When there are two or more applicants for the same land preference is given to any person who has occupied the land and has spent money or labour in improving it; preference is also shown in the case of a person who has been enjoying the usufruct of the trees, if any, on the land on payment of tree tax, or who has been using the water of a well, if there is one on the land, for cultivation; military service rendered in the late war is also recognized as a preferential claim. Subject to these and other analogous considerations preference is, as a rule, given to the first applicant. If a resident ryot and a non-resident ryot claiming preferential rights as above described are rival applicants, the former gets the preference if their preferential claims are equal in other respects. A ryot through whose relinquishment or default in payment of revenue the land has become unoccupied has no preferential claim. Applications can be for a whole survey field or a part of a field, provided that it is in a single block and not in patches and is readily accessible from without, and provided also that the rest of the field is left in a compact block for future assignment. The applications are in the first instance disposed of by the Tahsildar. From this decision an appeal lies to the Divisional Officer if made within thirty days and no second appeal is admitted; but powers of revision are given to the Collector and the Board of Revenue in cases where the decision, original or appellate, was grossly inequitable or was passed in excess of authority or under a mistake of fact or owing to fraud or misrepresentation. With a view to ameliorate the condition of the depressed classes, Collectors are required to reserve lands for their exclusive benefit and to make assignments to them subject to conditions against alienation to members of other classes.

Transfer of registry

145. Applications for the transfer of registry of pattas are made in the office of the Collector or of some other duly authorized officer. If the application attested by the village officers is presented by both the parties or if it is supported by a decree of a Civil Court evidencing the change of ownership, it is at once granted. But where only one of the parties makes the application, and produces a duly executed and registered deed evidencing the transfer, notice is given in the District Gazette that the

transfer of registry has been applied for and that unless objection is made within three months of the date of publication of such notice, the transfer will be ordered. If objection is made, an inquiry is held and, according to the result, the transfer is ordered or not. If it is ordered, a patta is issued in the name of the transferee at the next annual settlement. Meanwhile, as a rule, the new holder gets possession. In the event of the death of a pattadar, executive orders provide that the village officers should take steps to ascertain who is the proper successor. The Collector, when satisfied, causes a patta to be issued in the name of the presumptive heir or heirs, leaving the question of possession and other rights to be decided in case of dispute in the Civil Courts. When documents relating to the transfer of landed property are presented in an office of registration of assurances, the registering officer obtains an application from the parties concerned for the transfer of revenue registry of the lands conveyed or transferred and forwards the same to the Revenue Department. If such application cannot be obtained from the parties, the registering officer sends notices of the transaction to the Revenue Department.

Relinquishment

146. Ryots are allowed to relinquish their lands provided they apply for permission to relinquish sufficiently early in the season to enable others to commence cultivation upon them. The dates up to which ryots are permitted to relinquish their lands vary in the several districts, so as to follow the first rains in each district. The lands relinquished must be accessible to others, otherwise the relinquishment is not accepted. For instance, a ryot would not be permitted to retain all the fields in his holding except the central one, as this would not be an eligible holding for another ryot.

West coast

147. The tenure of the holders of land directly under Government in the districts of Malabar and South Kanara is substantially as described above. It was, however, the practice in Malabar and in the Wynaad to register lands in the names of the occupants and to collect the revenue from them, ignoring the janmi or the proprietor. The Madras High Court having held in 1889 that this practice was illegal, the janmis are now registered by the Collector and are held responsible for the payment of Government revenue. An Act called the Malabar Land Registration Act was passed in 1896 to enable the Collector to ascertain and register the names of the janmis. As the High Court ruled that the increase in the assessment fixed at the settlement commenced in 1902 over that fixed at the settlement of 1819 in the South Kanara district should be borne exclusively by the mulgar (the owner of the land), and as this decision resulted in hardship to the mulgar in a majority of cases, the Mulgeni Rent Enhancement Act, 1920, was passed, providing for the apportionment of the increase between the mulgar and the mulgenidar or tenant.

Ordinary inam tenures of land

148. When the State has given up its right to the land revenue, or a portion of it, in favour of an individual or an institution, or to remunerate persons for performing certain duties, the grant is termed an *inam* or *manyam*. In 1858 a Commission was established to examine the titles of the possessors of inams, and of the inams that were confirmed, to continue those that were still required for religious, charitable or village service and to enfranchise those of other descriptions, if the possessors wished, by commuting for a moderate quit-rent the right of the Government to prevent alienation, to resume, or to demand service. Service inams are held revenue free or subject to favourable rates. They cannot be alienated without forfeiture of the favourable tenure. The conditions of the grant must in each case be observed by the holder and the Government claim an absolute right to adjudicate as to the proper fulfilment of those conditions. In the case of village service inams the holders are bound to perform certain administrative duties, and are styled village officers: the succession to these inams is governed by a special enactment, and is hereditary in most districts. The inams attached to the more important village offices have, however, been enfranchised, and the village officers are now remunerated by money salaries.

Land held on cowles, etc.

149. A cowle is a grant of land free of assessment for a certain period, or subject to favourable assessment gradually rising to full assessment. Until the full assessment is imposed, the holder is subject to the terms of the contract contained in the cowle. The cowle tenure is usually granted to induce ryots to bring under cultivation unpromising waste lands or to plant trees or shrubs for green manure. Lands held under the tope rules are of the same nature, their object being to encourage tree planting. The terms of a cowle reserve to Government the power of re-entry on breach of its conditions.

Farming the revenue

150. The principle of farming out the land revenue in certain localities for a certain period has almost disappeared. Some rents, however, still remain in the Vizagapatam, Gōdāvari, Chingleput and Salem districts. The old joint-rent system, where the villagers themselves took up the lease and were jointly and severally responsible, has now entirely disappeared. The last trace of it existed some years ago in the hilly parts of the Gōdāvari district now included in the Agency division.

Mirasi rights

151. The rights which go by the name of mirasi must be mentioned here. They are not sufficiently strong to be classed as tenures or rights against the Government, as are zamindari or ryotwari; but they are sometimes more than the mere preferential right to occupy new land and they are recognized by the Government. The only trace that remains now of the special rights of the old communal oligarchies is the claim by certain hereditary mirasidars in Chingleput district to fees upon waste land which may hereafter be brought under cultivation, and upon lands now occupied which may hereafter be relinquished and again re-occupied. These fees were formerly taken from the gross produce before the division of the crop, and were then paid to the mirasidars both by the ryots and by the Government. They are now made payable entirely by the ryots, liberal allowance having been made for them in arriving at the rates of assessment charged on their lands. The fee payable by the ryot under these circumstances is a yearly sum of two annas in each rupee of the Government assessment, this amount being held to represent the old average rate of 3 per cent of the gross produce of the year. The right to collect these fees is recorded by the Government in the land revenue registers but their collection is left to the mirasidars themselves. The total amount of these fees payable to mirasidars in Chingleput district is very small, but the right is tenaciously maintained, and represents what was in former days a highly important institution.

Unassigned lands

152. Unassigned land within a Government ryotwari village is either assessed or unassessed. The mode in which assessed lands are applied for and taken up in the first instance has already been described. The unassessed land of a village is at the disposal of the Government. Subject to the instructions of the Government officers, certain portions are reserved for the gratuitous communal use of the villagers, as tanks, streets, channels, threshing-floor, burial-grounds, cattle-stands, etc., while in all villages, except on the West Coast, a house-site and a backyard, with permission to cultivate garden produce in it free of all assessment, are provided gratuitously for each family. The addition to or subtraction from the area of village-site is provided for by fixed rules. The unassessed waste lands of a village, which are not yet assigned, and are not reserved for these or other special purposes are available to ryots for cultivation. Applications for such lands are received by the Tahsildar. If on enquiry the Tahsildar finds that the land is not required for Government or communal purposes, or if its grant is otherwise unobjectionable, he publishes the proposal to assign it for occupation in the village and then obtains the orders of the Collector transferring it to the head of assessed land. If the Collector sanctions the transfer he fixes the assessment to be charged and the Tahsildar then deals with the application in the manner prescribed for assessed land. In the case of specially valuable unassessed lands, the grant of which on patta is not objectionable, the Collector may order the right of occupying the land to be sold by auction to the highest

bidder, who will be given a ryotwari patta, the land being transferred from "unassessed" to "assessed."

153. Unassigned lands outside the recognized limits of any village are of insignificant extent on the plains, which are fully occupied by village communities, but they abound on the hill ranges where the indigenous tribes have established only a very partial occupation. The areas for which special rules for assignment are prescribed are the Nilgiris, Malabar-Wynaad, the Shevaroys in the Salem district, the Palnis and the Kodaikānal taluk in Madura district. The procedure for the disposal of lands in these areas is the same as that for assessed lands, except that in these cases the assignment is subject to an initial payment which varies with the different locality. In the Nilgiris, excluding the Nilgiri-Wynaad, no assessment is charged till the sixth year on forest or grass land newly taken up under these rules and planted with coffee, tea, cinchona, rubber or other special products. Similar lands in the Nilgiri-Wynaad are allowed to be held free of assessment for three complete years.

Tenures other than those under the Government

154. In a ryotwari country the most important considerations connected with land tenures are those which concern the relations of the Government with persons holding immediately from it. The system of tenancy under such landholders is however fully developed, registered ryots sub-letting their lands and living on the difference between the rents they obtain and the assessment they pay to the Government. In the districts on the East Coast, lands are generally rented out by the landholders either for a fixed annual payment in money, or for a share in the produce. Ordinarily dry and garden lands are rented for money and irrigated lands for a share in the produce. In the case of permanently-settled estates, every ryot in possession of ryoti land not being old waste is the owner of the occupancy right in the land in his holding.

South Kanara

155. On the West Coast, tenancies are of a special nature, being more permanent than elsewhere, and the lands being generally leased out for a number of years. In South Kanara, tenants are of two kinds—mulgeni and chalgeni. The mulgenis are permanent tenants under the mulawargdar or landlord, paying a fixed and invariable rent. These tenancy rights have been for the most part obtained from the landlord as grants in perpetuity on payment of a fine and on condition of paying annually a specified rent. Such tenants cannot be ousted except for non-payment of rent, and even then not till they have been fully recompensed by the landlord for the permanent improvements they may have made on the lands. Subject to payment of rent, they are at liberty to sub-rent, mortgage or in some cases to sell their interest, and are rather subordinate landlords than mere tenants. On failure of heirs the title lapses to the landlord. In granting land on mulgeni tenure, conditions are now often imposed which are never found in the ancient deeds, e.g., that on the rent falling into arrears or the trees standing on the land being wilfully destroyed, the lease shall be forfeited. The chalgenis are temporary ryots under the mulawargdars or mulgenis, and their lease is for a limited term, usually one year, or even at will. In the case of these tenants the landlord has the right to raise the rent or oust the tenants whenever he pleases, when no period is fixed, after, however, re-imbursing him for all permanent improvements made by him. Practically the tenants are seldom ousted unless they are heavily in arrears. In some large estates there is an intermediary tenancy, when the tenants have no written leases, but are in practice treated as mulgenis. The rents of mulgenis and chalgenis are paid either in money or a certain quantity of grain, and never by a share of the crop as in other parts of the Presidency.

Malabar

156. In Malabar the principal tenures under which lands are held by tenants are kanam, panayam, kuzhikkanam and verumpattam. In the first two cases the tenant has some pecuniary interest in the land. In the case of kanam the rent is paid to the janmi (landlord) after allowing

the tenant a deduction on account of the interest on the sum advanced and the Government revenue of the land. This agreement generally extends over a period of twelve years, on the expiration of which it may be renewed or revoked. If the deed is renewed, the janmi usually claims a fee or allowance calculated at 20 per cent or more on the amount originally advanced. The sum so paid is not shown in the deeds, nor is it returned to the tenant at any time. If the janmi desires to resume the land, he has to make over to the tenant the whole of the deposit money and the value of any improvements which may have been effected by the tenant. This cannot be done before the expiration of the term of twelve years. If, in the meanwhile, the land deteriorates through the neglect of the tenant, he has to pay compensation to the janmi for the damage thus sustained. In the case of panayam, possession of land is given as security for a certain amount advanced. Rent is paid to the janmi after deducting the interest on the sum advanced at the rate specified in the deed. In some cases, when the deed provides that the mortgagee should pay the Government revenue, a sum on this account is also deducted from the rent payable to the janmi. When there is no period prescribed in the deed, the janmi may, whenever he likes, take back the land on payment to the mortgagee of the sum advanced Unoccupied waste lands are leased on kuzhikkanam right, generally for twelve years and sometimes for longer periods, for the purpose of raising buildings and plantations thereon; when the land is returned to the janmi on the expiration of the term, the value of improvements made by the tenant is paid to him. In these, as well as in the two foregoing cases, the right possessed by the tenants in the lands held by them is transferable. The death of either tenant or landlord does not affect the lease when there are surviving members in the family of either. Another kind of lease called verumpattam, or simple lease, is generally for one year and sometimes for longer periods, and is terminable according to the terms shown in the deed. A rent, generally two-thirds of the produce of the land, is annually paid by the tenant to the landlord. In the case of leases for longer periods than one year, the landlord receives in advance the rent for a certain period not exceeding one year. The tenant receives no interest for the amount thus advanced, but on the termination of the lease the amount is either repaid to the tenant or credit is given him for it against the rent due by him. There is also another kind of lease known as undarati, under which the landlord receives in advance the rent for a certain number of years and the land is let out to the tenant for the same period. The tenant has no more payments to make to the landlord. When the period expires, the land is returned to the landlord. This kind of lease is generally applicable to plantations. With a view to checking the practice of eviction of tenants in Malabar and to secure to the evicted tenants the full market-value of improvements effected by them an Act was passed in 1887. The language of the Act (I of 1887), however, gave room for diversities of construction and the result was that the object originally contemplated was frustrated in several cases. A new Act (I of 1900) has now taken its place. This has rectified the defects of the old Act not only as regards ambiguous and confusing language but also with regard to the principles to be followed in calculating the amount of compensation payable to the tenants.

SYSTEM OF SURVEY

Introduction

157. Indian land surveying is of three kinds—Trigonometrical, Topographical and Revenue or Cadastral.

Trigonometrical survey

158. Trigonometrical survey is divided into three distinct branches. First, the selection of sites for base-lines to form the ends of a series of triangles, the setting out of the base-lines and their measurement, with the utmost possible accuracy. Each base-line becomes the side of a triangle, the length of the other two sides of which can be ascertained by angular observations. Second, the construction of the series of triangles. This is done by determining the position of selected points on the earth's surface by angular observations taken at first from the ends of a measured base, and then carried on from point to point in succession, so as to form a network of positions fixed by this triangulation along a belt of country. The accuracy of the work is checked by the base-line at the other end of the series of triangles. The primary triangulation is completed by a sufficient number of such belts across the area to be surveyed both in the direction of latitude and longitude. Third, astronomical observations for latitude and longitude. These are taken at selected points in the network of triangles and operate as a further check on the accuracy of the triangulation. The positions of a sufficient number of points spread over the area to be surveyed are in this way fixed with the greatest accuracy.

Great Trigonometrical Survey *1802–1824*

159. The Great Trigonometrical Survey of the Madras Presidency was carried out by Colonel Lambton between the years 1802 and 1824. With the exception of the series of triangles along the West Coast, Colonel Lambton's triangulation has in later years been superseded by what are known as—

(1) the great arc series which extends from Cape Comorin to the Himalayas,
(2) the East Coast series from near Tuticorin to Calcutta, and
(3) the Madras longitudinal series of which the two ends are Madras and Mangalore.

From the beginning of 1818, the operations of the Great Trigonometrical Survey have been conducted by the Survey of India, which is an Imperial Department with headquarters at Calcutta.

Minor triangulation *1879–1886*

160. The Madras Survey Department carried out between the years 1879 and 1886 a minor triangulation of the hill tracts of Gōdāvari, Kistna and Guntūr districts, the Nallamalais in Kurnool, the Javadis in North Arcot, the Shevaroys and Kollimalais in Salem, the Warsanad hills in Madura, the Biligirirangan hills and the Anamalais in Coimbatore, the Attipadi valley in Malabar and South-East Wynaad in the Nilgiris. The Madras Survey triangulation consisted of the breaking up of the large triangles of the Great Trigonometrical Survey into smaller ones and the determination of the latitudes and longitudes of the minor trigonometrical stations with almost the same rigorous accuracy as in the Great Trigonometrical Survey.

Longitude

161. The longitudes of all the trigonometrical survey stations in India are referable to the Greenwich Meridian, taking that of the Madras Observatory as 80° 18′ 30″ east, as at first determined by Colonel Lambton. With the introduction of modern instruments of observation and the adoption of more accurate methods of calculation, this value was found to require correction to make it accord with the Great Trigonometrical Survey. This reduced value, viz., 80° 17′ 21″, has been adopted in all calculations made by the Madras Survey Department. The most recent value arrived at by the Survey of India is 80° 14′ 54″, which is now adopted in all calculations made by the Madras Survey Department.

Topographical survey

162. The earliest topographical surveys were made by officers of the Madras Quartermaster-General's Department at the end of the eighteenth century. The topographical survey of the Madras Presidency was

1840

completed by about the year 1840 and the results of the survey were embodied in 23 Ordnance sheets or, as they are called, sheets of the Atlas of India, published by the Surveyor-General's Office, Calcutta, on the scale 1 inch = 4 miles. The atlas sheets are revised at Calcutta from time to time as the materials of later topographical surveys and of cadastral surveys become available ; they are published in quarter sheets. Thirty-nine quarter sheets relating to the Presidency have been revised and published. But the sheets of the Atlas of India are being gradually superseded by the degree sheet series, forty-three sheets of which have been published up to date.

By the Madras Survey Department *1858-1886*

163. When the cadastral survey of the Presidency was first instituted in 1858, the topographical survey, which had till then remained under the direction of the Surveyor-General, was amalgamated with the cadastral survey. Up to 1878, the topographical survey of hill tracts by the Madras Survey Department was not based on any trigonometrical points, the cadastral survey traverse stations at the foot of the hills being the only fixed points the topographical surveyors had for starting and closing their work. From 1878, however, the topographical survey of large hill tracts was based on Madras Survey minor triangulation, starting from and closing on stations of the Great Trigonometrical Survey of India. The great and minor trigonometrical points were projected in office on the scale of 1 inch to the mile on plane table sheets on which any traverse work that might have been executed in the tract under survey was also plotted. The sheets were then mounted on plane table heads and sent to the field, where topographical features, such as hills, rivers, tanks, village-sites, roads, etc., were delineated on them. This method, however, was still defective inasmuch as the hill contours were not drawn with reference to heights.

In Zamindaris

164. In the case of large zamindaris, such as Rāmnād and Sivaganga, to which the operations of the cadastral survey did not extend, the exterior boundaries and some interior divisional lines were traversed with the theodolite and the traverse work was plotted on plane table sheets. In the case of proprietary estates and other non-ryotwari villages of small area, which are often surrounded by ryotwari land, it generally happened that the true boundaries had already been demarcated and surveyed with the theodolite. For large zamindaris, the scale of the map was either 2 inches or 1 inch to the mile. For small proprietary estates, the scale was 4 or 2 inches to the mile.

By the Survey of India Department *1886-1902*

Additional area cadastrally surveyed *1898-1909*

165. The topographical survey was transferred to the Survey of India in 1886 and that department was expected to complete the survey of 13,508 square miles of country which had been excluded from the operations of the Madras Cadastral Survey in the districts of Ganjām, Vizagapatam, Trichinopoly, Madura, Tinnevelly, Malabar and South Kanara. Of this area 4,448 square miles have since been cadastrally surveyed, the Madras Survey Department having surveyed 3,348 square miles in the districts of Ganjām, Vizagapatam, Trichinopoly, Madura and Tinnevelly, while the area (1,100 square miles) of the State of Pudukōttai in the Trichinopoly district has been surveyed by a survey party organized by the State. A considerable portion of the remaining area was surveyed during the course of forest surveys made by a party of the Survey of India Department.

Fresh topographical survey of the whole of India ordered

166. As a result of the report of the Indian Survey Committee, which visited the various provinces in the years 1904 and 1905, the Government of India decided that a fresh topographical survey of the whole of India should be made by the Survey of India Department. This survey was commenced in the Presidency in 1907 and, as explained below, the cadastral work of the Madras Survey Department has been accepted by the Survey of India in all tracts where surveys were made on a traverse basis.

Revenue or cadastral

167. Revenue or cadastral survey constitutes the bulk of the work of the Madras Survey Department. The object of a cadastral survey is briefly the delimitation of village and field boundaries, the preparation of

village and field maps showing these boundaries and topographical details, and of land registers containing particulars as to the number of fields and sub-divisions, tenure, ownership, etc.

Experimental Revenue Survey in South Arcot *1853*

168. Before 1853 no cadastral survey had been attempted in the Madras Presidency and the only data available for revenue purposes were the original "paimash" measurements, carried out by unskilled agency, from which no maps were, or could be, plotted. In 1853 an experimental survey of villages in the South Arcot district was instituted. During the two succeeding years the subject of a general survey of the whole Presidency was fully discussed, and in December 1856 the Court of Directors sanctioned the appointment of a Superintendent of Revenue Survey. After the organization of the necessary establishment, the revenue or cadastral survey of the Presidency was commenced in 1858.

169. The Madras Cadastral Survey comprises four distinct processes —demarcation, survey, mapping and publication—each of which is described below in detail.

Demarcation

By the Settlement Department *1858–1866*

170. The demarcation of boundaries of villages and fields was at first undertaken by the Settlement Department. About the end of 1864 it was ordered that in all districts to be taken up thereafter, demarcation should be performed by the Survey Department, but this order was not carried into effect until 1866. By that time the Settlement Department had completed the demarcation of nine complete districts and of parts of three others. The tri-junctions of villages were marked with stones or with masonry pillars. Secondary pillars or stones, a little smaller than those just mentioned, were also fixed, one on each side of the tri-junction mark, i.e., at the bends or corners of the village boundary next to the tri-junction. The demarcation of the rest of the village boundary with durable marks was not considered necessary. The cultivated portions of each village were divided into khandams (divisions) of about 50 acres each. Two or more adjoining patta holdings were combined to form a survey field, the size of which was limited to 2 acres in wet land and 4 acres in dry land. During field demarcation, a field register was prepared for each village showing the nature of cultivation, tenure, reputed ownership and extent by paimash of each survey field and of the holdings included in it. In a column provided for the purpose, the area by survey was entered in office after the necessary calculations had been duly checked. The demarcation of khandam and field boundaries in Gōdāvari and Trichinopoly districts and in the taluks of Bandar and Gudivāda of Kistna district was carried out with earthen mounds which disappeared in course of time, thus necessitating a re-demarcation and re-survey. In certain taluks in the districts of Nellore, Salem and North Arcot, as the demarcation marks originally fixed were not of a durable kind, they were replaced subsequently by cut stones.

By the Survey Department *1866* and onwards

171. In 1866 when the Survey Department undertook demarcation, the average size of khandams was raised from 50, first to 80 and afterwards to between 100 and 150 acres. As regards survey fields, the limits of size which had been observed by the Settlement Department, 2 acres in wet and 4 acres in dry land, were retained. The Survey Department also sub-divided such waste lands as were likely to be taken up for cultivation within two or three years, the size of survey fields formed being 4 acres in wet and 10 acres in dry land. In the year 1874, the *1874* clubbing of patta holdings in dry land of little value was permitted up to a maximum of 12 acres. In 1885, when the survey of the Tanjore district *1885* was ordered, the clubbing of wet holdings up to a limit of 4 acres was sanctioned, subject to the condition that the holdings clubbed should be irrigated from one and the same channel. In 1887, in accordance with the *1887* recommendations of the Survey and Settlement Committee, the maximum size of survey fields was fixed at 6 acres in wet and 12 acres in dry land. But, as the enforcement of this rule led, especially in the Malabar district, to the formation of survey fields containing an inconveniently large number of sub-divisions (patta holdings), the boundaries of which it was

1894

very difficult to trace on the ground, the number of patta holdings to be clubbed to form a survey field was limited in 1894 to ten. The clubbing of holdings to form survey fields was dispensed with wholly in the Chicacole taluk of the Ganjām district and every holding was treated as a separate survey field. The same principle, with some modifications, was followed in the other two taluks of that district. The average size of a survey field in Ganjām was thus 1·71 acres against the Presidency average of 4·49 acres.

Revenue survey
Theodolite Survey

172. Survey comprises two principal operations: theodolite survey and cadastral survey. The object of a theodolite survey is to provide a sufficient number of fixed points for the cadastral survey. For this purpose, the villages of a taluk were grouped into convenient blocks, called main circuits, varying from 100 to 150 square miles in extent. First the main circuits and then the village and khandam boundaries were surveyed with theodolite and chain. To secure strict accuracy, the distances on the main circuit boundary were measured twice, first by the theodolite surveyor and again by another person called the re-chain surveyor who followed him. The angular work of the main circuit was checked by observations for azimuth taken at intervals of 40 or 50 stations. The main circuit traverses were set up in office, i.e., the angles and distances were copied into traverse sheets and the bearings, latitudes and departures were computed. The main circuits were connected with stations of the Great Trigonometrical Survey and the distance according to the cadastral survey between every two Great Trigonometrical Survey stations was compared with the trigonometrical distance. The average error for the distances so compared has been found to be 7·28 feet per mile for the whole Presidency.

1877
Comparison of Theodolite Survey with the Great Trigonometrical Survey
1878–1891
Selection of origin of co-ordinates

173. From the commencement of the cadastral survey of the Presidency up to 1877, the cadastral survey distances were merely compared with the Great Trigonometrical Survey distances and the difference noted, but no attempt was made to correct the former so as to bring them into agreement with the latter, as the traverses were not worked on any one meridian common to main circuits, taluks or districts. From 1878 to 1891, the following method was adopted. A Great Trigonometrical Survey station situated as near as possible to the centre of a district was selected as the origin of co-ordinates for the traverse work of the district. The main circuit traverse started from a Great Trigonometrical Survey station in the vicinity of the circuit and closed on another Great Trigonometrical Survey station. The true azimuths on the main circuit boundary were corrected for convergency with reference to the meridian of the Great Trigonometrical station of origin. The rectangular co-ordinates from the Great Trigonometrical station of origin to the two Great Trigonometrical stations introduced into the main circuit traverse were computed, and with reference to the difference between these two co-ordinates the cadastral survey latitudes and departures were corrected. The corrections in the main circuit traverses were carried to the village and khandam traverses.

System of Theodolite Survey adopted *1892*

174. In the year 1892 the theodolite survey of village and khandam boundaries was discontinued as being too costly for the localities which then remained to be surveyed. Villages were divided into triangles with sides about half a mile long and the three angles of each triangle were observed. Base lines were measured at convenient intervals and the lengths of the sides of the triangles computed. With the exception of the tri-junctions of villages, the stations used for this triangulation were generally not boundary marks. This system was adopted for twelve taluks in the districts of Malabar, South Kanara and Anantapur. In these taluks, traverses were harmonized with Great Trigonometrical Survey co-ordinates, but not with reference to a central station of origin. The main traverses started from one Great Trigonometrical station and closed on the next. The Revenue Survey latitudes and departures between the Great Trigonometrical stations were compared with the rectangular co-ordinates from one Great Trigonometrical station to the other and

corrected to agree with them, but the bearings of the Revenue Survey traverses were not corrected for convergency of meridian. The method now in use for harmonizing traverses is the same as that adopted from 1878 to 1891 except that the origin for each district is the nearest intersection to the centre of the district of parallels of latitude and longitude to whole minutes. All the traverse surveys of the department are being harmonized on this method, and 15 traverse charts showing the rectangular co-ordinates of all village tri-junctions are in course of preparation.

Present method of harmonizing traverses

175. The method of measurement of individual properties and holdings underwent several changes as the survey progressed. From 1858 to 1865 survey fields were measured on the "khasra" method, according to which, if the field was quadrilateral, the four sides were measured, or, if the field was irregular in shape, it was divided into convenient quadrilaterals or triangles or both and their sides measured. The rule was that the diagonal of every quadrilateral should be measured, but this was not always done. Some of the measurement books prepared under this system contain a sketch of each field not plotted to scale, but in others there are no sketches of any kind. The measurement books were supplemented by a sketch for each khandam in which the boundaries of the fields and the sides of the quadrilaterals and triangles with their measurements were shown, but these sketches were subsequently destroyed. The khasra method of measuring fields enabled the field surveyors or amins, as they were then called, to calculate the areas of fields, by multiplying in quadrilaterals the mean of the two opposite sides, or in triangles by multiplying the two shorter sides, and taking half the product. This incorrect method of calculating areas was abolished towards the end of 1864, when the computing scale was introduced. The necessity for measuring fields in quadrilaterals having thus ceased, field surveyors were directed in 1866 to measure from stone to stone so as to divide each field into triangles as nearly equilateral as the shape of the field would allow. The measurements were recorded in books of which each page contained a sketch, not drawn to scale, of several survey fields. A further step was made in 1877 when surveyors were permitted, in cases where the bends on the field boundaries were very numerous, to fix by offsets the position of all marks less than 50 links from a direct line between two adjoining survey stones; but the change was not introduced to any appreciable extent.

Methods of measurement of fields *1858–1865*

Khasra method

Khasra areas

1864

Introduction of the computing scale *1866*

Triangle system of measurement *1877*

176. Towards the end of 1887, as a result of the deliberations of the Survey and Settlement Committee, the measurement of sub-divisions or interstitial fields, which till then had been made by the Settlement Department, was entrusted to the Survey Department. In order to expedite work the use of the plane table was recommended for fixing the boundaries of survey fields but was not used. From the skeleton traverse plot of the village the theodolite stations were pricked off into a "quarter sheet," so named because it was intended to show an area of about a quarter of a square mile. In this quarter sheet the boundaries of survey fields were sketched in by the surveyor as they were demarcated. The sides of the triangles formed by the theodolite stations were chained and offsets were taken to all field marks, and the chain line and offset measurements were entered in the quarter sheet. The outer boundaries of such of the survey fields as contained sub-divisions were also measured but the measurements were not entered in the quarter sheet. A separate record known as the interstitial or sub-division field book was prepared in which were shown the measurements of the outer boundaries of survey fields and sub-divisions and of the quadrilaterals and triangles into which the latter were divided. In the matter of sub-divisions, there was thus a reversion to the condemned "khasra" method. In all, 18 taluks in the districts of Vizagapatam, Bellary, Anantapur, Tanjore, Malabar and South Kanara and 33 Kolair lake villages in Kistna, were surveyed on the so-called plane table system, but

1887

Measurement of interstitial fields entrusted to the Survey Department

Quarter sheet

Interstitial or sub-division field book

owing to the absence of the quarter sheets or records of measurement from which the village maps were plotted the re-survey of much of this area has been rendered necessary. In order to minimize the number of survey records, the following method was adopted in 1892. The points fixed during the theodolite survey were plotted on the scale 1 inch=2 chains or 40 inches to a mile on sheets each of which contained a block of about a quarter of a square mile. The block was divided into large triangles and the boundaries of survey fields as well as of sub-divisions included therein were fixed by offsets taken from the sides of the triangles. All the measurements were entered on the block map, which thus became a complete record of measurement. The areas of fields and sub-divisions were computed from the block map with the area square, which is a piece of tissue paper on which are printed squares and rectangles, the former representing 10 cents and the latter one cent each. The methods of survey described above were those adopted for the initial cadastral survey of Government villages which was completed in 1896.

Block maps

Area square

177. The Vizianagram zamindari furnishes the earliest and most typical example of the method employed in the survey of the majority of estates. The theodolite survey of main circuits, villages and khandams was carried out on the system prevailing in Government areas up to 1877. Patta holdings were clubbed up to 4 acres in wet and 8 acres in dry land, all field bends being demarcated with stones. The measurement and mapping of fields were done on the triangle and offset method described below. In the survey of the Punganur estate, a method was employed which has taken its name from the estate ; generally speaking, all the field bends are offsetted on a single diagonal line which is run across each field. The fact that each bend is doubly offsetted—first from one and then from the other of the two fields which it separates—ensures an accurate check on the measurements. This method, which is undoubtedly the most accurate of all, has many advocates, but the cost involved in the demarcation of every field bend is likely to be prohibitive. Up to the end of 1921 the survey of an area of 9,968 square miles in proprietary estates and non-ryotwari villages had been surveyed. An extent of 36,686 square miles remains unsurveyed ; the application of the provisions of the Madras Estate Land Act will probably result in the eventual survey of most of this area.

Forest survey

178. When topographical survey work was transferred to the Survey of India in 1886, it was arranged that that department should also undertake the survey of Forest reserves, the necessary demarcation being made by the Forest Department. A Forest Party of the Survey of India began work in this Presidency in 1888. Maps are published on a scale of 4 inches =1 mile. Maps of forests less than 10 square miles in extent are prepared from the published village and taluk maps either by the Forest Department or in the Survey Office, Madras, and printed on a scale of 4 or 8 inches=1 mile. The survey of all forest reserves exceeding 10 miles in area is now practically complete.

Mamul wet survey

Gōdāvari, Kistna and Guntūr districts

179. In the Gōdāvari, Kistna and Guntūr districts, owing to the introduction of large irrigation projects, considerable areas, which till then had been waste or only fit for dry cultivation, were brought under wet cultivation. In order to levy water-rate on these areas, and also to determine the extent of "mamul wet" lands which had been deprived of their original sources of irrigation and were entitled to water free of charge from the new canals, it was found necessary to make a detailed survey of the non-ryotwari villages in the deltas in these three districts. The mamul wet areas were demarcated *en bloc*. The newly irrigated areas outside the mamul wet blocks were formed into survey fields of about 10 acres each and demarcated and measured. The patta holdings within the 10-acre fields were also measured. A field measurement book, field register and map were prepared for each village. The survey, begun in 1890 and completed in 1896, covered an area of 1,226 square miles. In the

Ganjām district

Ganjām district, a similar survey of inam villages, with an area of 136 square miles, which were affected by the Rushikulya system, was carried out between 1891 and 1894 under the supervision of the Collector. Seven inam villages, with an area of 19 square miles, irrigated by channels from the Pālār anicut in the Walajapet taluk were also similarly surveyed under the supervision of the Collector of North Arcot in the years 1904 and 1905. These surveys were not on a traverse basis and were under defective supervision; the whole operation will probably have to be re-done, and in fact a definite decision to this effect has been reached in the case of the non-ryotwari villages of the Kistna and Gōdāvari deltas. Owing to the construction of the Periyār water works, the non-ryotwari villages in the Mēlur, Madura and Dindigul taluks, comprising an area of 88 square miles, were also surveyed during the years 1896—1898. This survey was made in such detail that it was practically a cadastral survey.

North Arcot district

Madura district

180. For the purpose of determining the land tax payable to local boards, a block survey of whole inam villages was made in the districts of Gōdāvari, Kistna, Guntūr, Nellore, Tanjore and Trichinopoly, in the Berhampur taluk and in the Serugada, Dharakota and Kurla estates of the Ganjām district between the years 1895 and 1902. The villages were divided by Settlement classifiers into blocks according to peculiarities of soil and demarcated with pegs or earthen mounds. The blocks were measured and mapped by the Survey Department and the areas of the blocks entered in the classification registers prepared by the Settlement Department.

Soil block survey

181. A survey of Madras town was made by the Public Works Department between the years 1854 and 1864. The results of the survey were not wholly adopted in the revenue accounts, and, as the survey maps were found to be of little or no use for either revenue or topographical purposes, a new survey was recommended in 1891. The new survey was made between the years 1895 and 1897, and it has been brought up-to-date by a special establishment.

Survey of Madras city

182. It was also considered necessary to make a survey of the mufassal municipal towns and to plot maps on a scale sufficient to make them available for checking encroachments and defining the limits of private and public properties. The survey of 29 towns including Madras has been completed. Every holding was measured, and a field book, or record of measurement, and register were prepared for each of the wards. Ward maps have also been prepared for 25 towns. The manuscript revenue maps are either on the scale of 160, 80 or 40 inches to the mile according as the locality concerned is close, medium or open, and the printed maps are on half the scale of the manuscript maps. Topographical maps are also printed on the scale of 20 inches to the mile for each ward or division. The town maps are on the 10-inch scale. Seven more towns, viz., Bezwada, Masulipatam, Anantapur, Calicut, Cannanore, Tellicherry and Cochin, were surveyed between 1890 and 1896, while the cadastral survey or re-survey of the taluks in which they are situated was in progress, but not in such detail as the above-mentioned 29 towns. The scale of maps of these seven towns varied from 32 to 160 inches to the mile. When the maintenance of the survey of the first 28 towns was taken up, the cadastral survey records of the seven towns were re-prepared in the Central Survey Office as far as possible on the town survey method with a view to introduce maintenance into them also. Actual experience having, however, proved the inadequacy of the cadastral survey records for the purpose of maintenance, the seven towns will probably require a re-survey to bring their records into line with those of the other 29 towns. Twenty-nine other towns have been recently surveyed and the maps will shortly be published. Surveys to mark the limits of streets are in progress or are contemplated in the unions of districts where re-surveys are being conducted.

Municipal survey

Town survey

Scale of revenue maps

Scale of topographical town maps

Scale of town maps

Mapping

183. The maps prepared by the Madras Survey Department are generally :—

(1) Atlases of fields on scales 16, 40 and 80 inches = 1 mile ;
(2) Village maps—scale 16 or 8 inches = 1 mile ;
(3) Outline sheets of 15 minutes square—scale 1 inch = 1 mile ;
(4) Taluk and zamindari maps—scale 1 inch = 1 mile ;
(5) District touring maps—scale 1 inch = 4 miles.

Field atlases

Field atlases are now plotted by surveyors during the course of measurement on sheets (size 12 inches by 10 inches) of 80-pound paper.

The scale depends on the area and is as follows :—

Up to 5 acres	80-inch scale.
„ 20 „	40 „
Over 20 „	16 „

Village maps

184. Village maps are now plotted in the headquarter office of each party. The village and division boundaries are first plotted with the aid of the traverses computed from the theodolite survey field books. Starting from the points thus fixed, the fields measured during the field survey are plotted, the field boundaries inked and the field numbers typed and the village map completed in other respects. Prior to 1878 village maps were not prepared in a style suitable for re-production by photography nor were they drawn on sheets of uniform size. From that year a standard size was adopted of 40 by 27 inches for full sheets and 27 by 20 inches for half sheets. All coloured lines, connecting traverse stations and colour ribands indicating wet and dry cultivation, which were drawn on the face of the maps prepared in former years, were relegated to the back ; and the detail shown on the face of the maps was drawn specially with a view to reduction by photography to the scale of 8 inches to a mile. In the block maps prepared on the 40-inch scale between the years 1892 and 1896 the field and sub-division boundaries and the topographical details drawn in blue were inked and the field numbers typed in black sufficiently thick to stand photo-reduction to the 16-inch scale, but the chain lines, offsets and measurements which were not required to appear in the village map when published, were left in blue. For villages mapped on the 40-inch scale a skeleton map was prepared on the scale of 16 inches to a mile showing only the points fixed by the theodolite. Since 1915, on the recommendation of the Survey Committee, village maps have been drawn for publication to a scale of 16 inches = 1 mile. The Vandyke process is adopted for the purpose, and all colouring on the face or back of the original maps is dispensed with.

Methods prior to *1878*

Methods from *1878*

1892–1896

Preparation of village maps from block maps

Outline sheets

185. Outline sheets and traverse charts are prepared to assist the Survey of India in the topographical survey of the Presidency now in progress. The rectangular co-ordinates of the four corners of a sheet 15 minutes square (the general size of a standard sheet of the Survey of India) are worked out from the district origin ; such village tri-junctions as fall within the sheet are plotted therein by their rectangular co-ordinates and the interior parallels of latitude and longitude at 5 minutes intervals drawn. Pantagraph reductions of village maps, showing all details, save hill contours, are then traced on to the sheet in blue and inked in black for reproduction by the Vandyke process. The values of the rectangular co-ordinates from the district origin of such village tri-junctions as fall within the sheet are printed in the margin. This forms the traverse chart. The outline sheet is prepared by taking a copy of the traverse chart without the marginal values of village tri-junctions. On this are traced in blue pantagraph reductions of village maps showing all details except hill contours. This is enlarged to the 1½-inch scale by photography and a blue print thereof is obtained and drawn fair for photo-reduction and publication to the 1-inch scale. Thirteen copies of each outline sheet and twelve copies of each traverse chart are supplied. The acceptance of the work of the Madras Survey Department was decided

Supply of outline sheets to the Survey of India

on only after a careful scrutiny by the Survey of India of the value of the traverse surveys both in office and in the field. The test in the field was made in Malabar where fewer theodolite points were fixed than in the districts surveyed before 1892 and the result, to quote the words of the Superintendent, Southern Circle, Survey of India, was such as to justify the acceptance of the work of the Madras survey as equal to revenue surveys performed by the Survey of India. The supply of outline sheets to the Survey of India will materially lessen the cost of the topographical survey of the Presidency as first estimated.

Acceptance of Madras surveys by the Survey of India

186. For the compilation of taluk maps different methods were adopted at different periods :—

Taluk maps

(1) Up to 1878 taluk maps were not drawn on geographical projections. The boundaries of main circuits and of villages were plotted by traverse on the scale 1 inch=1 mile and the detail within them was filled in from pantagraph reductions of the village maps.

1878

(2) From 1879 to 1886 taluk maps, scale 1 inch=1 mile, were drawn on sheets on which were previously projected lines of latitude and longitude, Trigonometrical stations and main circuit tri-junctions. Some of the village tri-junctions were also plotted by traverse. The topographical details were filled in from pantagraph reductions of the village maps. Either the whole taluk was contained in two or more sheets joined together or each sheet contained 15 minutes of latitude and 30 minutes longitude.

1879–1886

(3) From 1887 to 1894 projections were prepared on the scale 8 inches = 1 mile showing lines of latitude and longitude, trigonometrical stations and main circuit tri-junctions. Eight-inch lithographed village maps were fixed on to the projections. Over these were pasted in their proper places printed slips of paper showing in an exaggerated style the details required to appear in taluk maps.

1887–1894

(4) From 1895 to 1901 projections were prepared on the scale 2 inches = 1 mile showing lines of latitude and longitude, trigonometrical stations and a few village tri-junctions. Sixteen-inch or 8-inch lithographed village maps were reduced by photography to the scale of 2 inches to the mile and printed in pale blue ink. The blue prints were joined together on the 2-inch projected sheets (with reference to the trigonometrical stations and other fixed points) and the details, etc., required to appear in the taluk map when printed were drawn over in black for photo-reduction to the 1-inch or $\frac{1}{2}$-inch scale.

1895–1901

(5) From 1902 to 1910 taluk maps were prepared in the manner last described above but instead of the 2-inch reductions being obtained by photography from the village maps, the latter were reduced by the pantagraph and the details traced on to the 2-inch projections from the pantagraph reductions. The values of all the village tri-junctions were determined and plotted in the projections. The map was drawn for photo-reduction to half scale, i.e., 1 inch = 1 mile.

1902–1910

(6) Taluk maps are now being prepared from the outline sheets, corrected by comparison with the Survey of India standard sheets and by the adoption of the hill contours in those sheets.

187. The methods of compiling district maps from time to time were similar to those adopted for taluk maps. Of late years district touring maps without hill contours roughly corrected by the help of district officers in districts where no recent survey had been made have taken the place of the old type of district maps. In future these will be drawn from the taluk maps.

District touring maps

188. The processes adopted in the Central Survey Office for printing maps are chiefly lithography, photo-zincography, cyanotype, vandyke and helio-zincography. Village maps coloured on the face and unsuited in

Publication

other respects for reproduction by photography were copied on hand-transfer (paper coated with flour-paste and gamboge) and lithographed. The first attempt by the Madras Survey Department to make photography serve the purpose of printing maps was in 1873, but the art was not applied to village maps until 1878. In the latter year, zincography was also introduced. Village maps on the 16-inch scale were subsequently reduced to the 8-inch scale and zincographed. Since the introduction of the vandyke process in 1905, they have been drawn to the scale 16 inches = 1 mile.

1873 Photography first used

1878 Zincography first used

Village maps

189. At present 40 copies are printed of each village map. Thirty-four copies are supplied to the Collector. Of the other six copies, one is supplied to the Board of Revenue and five are kept in the Central Survey Office. For many villages, however, the stock in the Survey office is only one and in some cases is *nil*. In addition, three copies printed in blue are supplied to Collectors for use at the periodical revision of the maps ; but in view of the abolition of the Land Records Department this procedure will require alteration.

District and taluk maps

190. Up to 1886, taluk and district maps were either photographed to scale or copied in the Central Survey Office on hand-transfer and printed by the process of zincography or lithography according as the maps were drawn in a style suited for reproduction by photography or not. Taluk maps, drawn from 1887 to 1893 on the 8-inch scale, were reduced by photography to the 1-inch scale, the carbon transfers were joined together on a 1-inch projection, transferred to zinc and copies printed. From 1901 to 1910, taluk and district maps were reduced by photography and printed in blue by what is called the cyanotype process which was introduced in 1901. Since 1910, taluk and district maps have generally been printed by the helio-zincographic or by the vandyke process ; the former method alone is at present in use.

Re-survey

191. In some of the districts first surveyed the demarcation of fields was not of a permanent character and in others a large percentage of the stones fixed had disappeared. The sketches of interstitial field measurements made by the Settlement Department were generally missing, and in the few instances in which they did exist, it was not found practicable to incorporate them into the field measurement books prepared by the Survey Department. No attempt had been made to maintain the survey as an accurate contemporary record, and the maps originally prepared were out of print and discrepant with actual conditions. For these reasons, a fresh survey was ordered in sixteen districts. The nature of the operations which had to be undertaken in tracts where the original survey was found defective varied in accordance with the value of the records and the permanence of the demarcation left by the original survey. Where these afforded sufficient material to allow of the replacing of missing stones and the plotting of separate maps of survey fields, the work to be done consisted mainly in measuring, plotting and mapping sub-divisions effected since the original survey and the process was called a revision survey. Where they are not sufficient for these purposes, the measurement and plotting of the survey fields has to be done over again and the work is called a re-survey. The cost of these two processes being practically equal, and the results of a re-survey being proved to be much more satisfactory, the use of revision surveys has been discontinued.

1891 Re-survey of Trichinopoly and certain taluks of Gōdāvari, Kistna and Guntūr districts

192. Trichinopoly was the first district taken up for re-survey. The re-survey began in 1891. The earthen mounds erected during the original demarcation had all disappeared and the re-demarcation and re-survey, therefore, followed occupation disregarding the original survey field boundaries and numbers. New survey fields were formed by clubbing holdings up to 6 acres in wet and 12 acres in dry land. The re-survey was made on the block map system. No fresh theodolite survey was

made, nor were any of the missing theodolite stations of the original survey replaced with the theodolite. Certain taluks in the districts of Gōdāvari, Kistna and Guntūr were re-surveyed on the system adopted for Trichinopoly. The re-survey of these tracts and of those described in the next paragraph was done almost entirely by the agency of village karnams with insufficient supervision, at a cost, including mapping, of from Rs. 83 to Rs. 40 per square mile.

1893 Re-survey of Salem and certain taluks of Gōdāvari, Kistna and Guntūr districts

193. The re-survey of the five southern taluks of the Salem district was commenced in 1893. As in Trichinopoly the re-demarcation in Salem followed occupation, but, with a view to reduce the cost of work, no alterations were made either in the original size or numbering of the survey fields. Each field was divided into triangles. Distances from stone to stone on the field boundary and from bend to bend on the sub-division boundaries were measured, as also the sides of the triangles from which bends on field and sub-division boundaries were fixed by offsets. A field measurement book showing the re-survey boundaries of the fields was plotted to scale, but not the village map. In a lithographed copy of the original survey map, the scale of which was 16 inches = 1 mile, the field boundaries (which might differ slightly from the demarcated boundaries shown in the field measurement book) were inked in black and a photo-reduction of this copy to the 8-inch scale served as a key to the position and shape of the survey fields. Two taluks of the Gōdāvari district, two taluks of the Kistna district, and one taluk of the Guntūr district, were re-demarcated and re-surveyed on this method. This form of re-survey was found to be unsuitable for the purposes of Revenue administration and maintenance and a fresh survey has been ordered.

Re-survey of certain taluks of Guntūr, Kurnool, Salem, Coimbatore, and the whole of Tinnevelly

194. The re-demarcation and re-survey of six taluks of the Guntūr district, of the whole of the Nellore district, of four taluks in the Kurnool district, of the four northern taluks of the Salem district and of four taluks of the Tinnevelly district, were made on the system just described, but the village maps are correct plots on the 16-inch scale and not copies of the old lithographed maps. Re-survey on the same lines, except that a fresh theodolite survey was required, as it was found that angles had been observed on pegs during the initial survey, has been completed in the Sankaranāyinārkōyil and Kovilpatti taluks of the Tinnevelly district, in Sāttūr and Srīvilliputtūr taluks of the Rāmnād district and in the taluks of Coimbatore and Palladam in the Coimbatore district as well as in the greater part of the Pollachi taluk.

Revision surveys in Ganjām, Kurnool, Chingleput, North Arcot, Chittoor and Anantapur districts

195. A revision survey, in which all missing stones are replaced and only such of the fields as contain sub-divisions are re-measured on the triangle and offset method and the village maps are tracings of the original survey maps, has been completed in the districts of Ganjām, Cuddapah, Chingleput and Chittoor and in portions of North Arcot, Kurnool and Anantapur.

Field registers

196. Whether in initial surveys, in re-surveys or in revision surveys, the field register prepared by the Survey Department followed, till very recently, the adangal of the latest fasli; but the adangal did not always agree with the actual occupation on the ground. The survey which was confined to the holdings as recorded in the field register was thus incomplete and the omission was supplied at great expense of time, labour and money during the course of the settlement operations. To avoid this state of things, it was ordered in 1905 when the revision survey of the Ganjām district was in progress that, before the demarcation and measurement of holdings was taken up by the Survey Department, a special Revenue staff working under the orders of a special Revenue officer under the control of the officer in charge of the survey party should make the necessary preliminary enquiries and prepare an accurate field register and also mark the position of all sub-divisions and

1905

Appointment of the special Revenue staff

new fields in a lithographed copy of the original survey village map. On completion of the survey, the field register and field measurement book are sent to the special Revenue staff for making such inspection of the work of the surveyors in the field as may be necessary to determine the completeness of the work before finally passing the field register and allowing it to be used for the correction of the permanent village accounts. Special Revenue staffs now work under the orders of the Special Settlement Officers in every district under survey. But the survey field staff now precedes the special staff, mapping the existing holdings and preparing a preliminary field register. After inspection, the field maps and the register are sent to the special staff for checking and for patta transfer work. On the completion of this work, the maps are returned to the Survey Officer with a note of any omissions found.

Maintenance

197. The question of maintenance of boundary marks and other survey records has engaged attention since 1864. Practical steps to secure this object were not taken until 1893, and it was only after ten years of preliminary effort that a complete scheme was drawn up and accepted. The scheme provided a maintenance staff for each district controlled by the Collector. In addition to these local staffs the Presidency was divided into five groups, each forming the inspection area of a Land Records Superintendent. The Superintendent had no authority to control or supervise. He merely inspected and reported the results of his inspection to District Collectors and to the Director of Land Records, to whose control he was immediately subject. The latter officer was subordinate to the Board of Revenue. Little progress was made in the direction of maintenance, for the permanent Land Records staffs, assisted by large temporary reinforcements, were engaged, not in maintenance itself, but in operations preliminary to maintenance. These operations had to be undertaken owing to the defective state of the records. The Committee appointed in 1914 came to the conclusion that regular maintenance could be satisfactorily substituted for periodical re-surveys. But the development of this principle was arrested by the abolition of the Land Records Department in 1921. The changes in the control of maintenance rendered necessary by this disappearance of the normal agency have been detailed in Chapter II infra under the heading "Administration of the Land—Land Records."

Law

198. The legal provisions under which the survey work of this Presidency was conducted up to 1897 were those contained in Act XXVIII of 1860, "An Act for the establishment and maintenance of boundary marks and for facilitating the settlement of boundary disputes in the Presidency of Fort St. George." Under this Act, Government bore the cost of all survey station stones which were not boundary marks and, of all boundary marks in unoccupied ryotwari lands and the owners bore the cost of the survey marks which defined the boundaries of occupied fields. For the better maintenance of boundaries after the completion of survey and for the recovery, from the ryots concerned, of the cost of restoring survey marks, Act II of 1884 was promulgated. This Act made the owner or occupier responsible for the maintenance of the boundary marks of his estate and enabled the Collector to enforce the maintenance of demarcation generally and to recover, where necessary, the expenses incurred in the repair of boundary marks from the owner or occupier of land. The two Acts were repealed by the Madras Survey and Boundaries Act IV of 1897 "An Act to amend the law relating to survey of lands and settlement of boundary disputes." While embodying in effect the provisions of the two previous Acts, the Act empowers the Government to undertake the survey of private estates either *suo motu* for reasons to be recorded prior to the issue of the notification directing the survey, or on the application of the proprietors. It also empowers the Collector to enforce the maintenance of survey marks in estates under conditions similar to those prescribed for Government villages. Chapter IV of the

Act provides for the settlement of boundary disputes, arising otherwise than in the course of survey, by the Collector himself or by one of his subordinates specially empowered, or by a Survey Officer specially appointed for the purpose. A Bill now before the Legislative Council provides for the remedying of certain defects brought to light in the working of the original Act. The Madras Estates Land Act I of 1908 empowers Government under certain conditions to order the survey and preparation of a record-of-rights for estates.

199. In 1919 the controlling staff of the department was re-organized, and the present strength consists of fifteen permanent officers, two probationers and two temporary officers employed in the survey of proprietary estates. The number of parties naturally varies with requirements, and the direction of their activities is centred in the Controlling and Photo-zincographic Office in Madras. Establishment

SYSTEM OF SETTLEMENTS

Early settlements under the British Government

Chingleput

200. The first general acquisition of territory by the East India Company—the first from a revenue point of view—was the country round Madras, which now forms Chingleput district. The revenue of this tract was assigned by the Nawab of the Carnatic as a contribution towards the expenses of the wars undertaken in his behalf. At first the direct administration was not assumed ; the revenues were collected on the native plan ; in 1780, however, the country was leased out by the Company in large farms on nine-year leases. The renters failed and the estates were sequestered in 1788. The district was then placed in charge of one or two Collectors, as the chief revenue officers were then called, the term being borrowed from Bengal. The most famous of these, Mr. Lionel Place, determined to restore the ancient village organization as the basis of revenue management and settled the amount of the Government revenue with the village councils, leaving it to the villagers to assess themselves individually. This system might have succeeded, but was summarily terminated in 1802. Under the orders of the Court of Directors the district was then divided into estates, each estate being assessed at a fixed sum varying according to its size and resources, and these estates were sold by auction to the highest bidder.

1780

1788

1802

Northern Circars

201. The next acquisitions of the Company in point of time were the Northern Circars (administrative divisions), five in number, which form the present districts of Ganjām, Vizagapatam, Gōdāvari, Kistna and Guntūr in the north-east of the Presidency. They were obtained by grant from the Delhi Emperor in 1765 and came at once under British administration. It was found that they consisted of large farms held by large renters called zamindars (as in Bengal), or in a few cases by native chiefs whose titles dated from the pre-Muhammadan period, and of crown lands (Havēli lands) reserved for the support of the governors of the province or members of the royal family and their immediate dependents. The zamindars were left in possession and the crown lands were parcelled out and leased to revenue farmers for a term of years. In 1769 provincial councils were formed after the model of Bengal to supervise the revenue management. They found the work of looking after the zamindaris too great for them and did not effect much. The next step was the appointment by the Court of Directors of a Special Commission or Committee of Circuit to make tours in the districts and institute inquiries into rights and interests. Their instructions were conceived in a liberal and enlightened spirit, but the local councils did not support the members and the renters did all in their power to thwart them. The commission, therefore, resulted in failure. In 1786 a Board of Revenue was established at Madras on the pattern of the Board already existing in Bengal, and about the same time individual collectors took the place of provincial councils in the Circars.

1765

1769

1786

Lord Cornwallis' system of permanent settlement *1789–1792*

202. In the same year that the Madras Government entered on the management of the Northern Circars, the Bengal Government assumed that of Bengal, Behar and Orissa ; and experiments were conducted in the latter case in very much the same way as in the former. The Bengal Government, however, came earlier to a decision and when Lord Cornwallis arrived in India in 1786 the plan of the permanent settlement with the Bengal zamindars had already been arranged. A tentative settlement of the whole of Bengal for a period of ten years was announced in 1789, and in 1792 the experiment of a permanent settlement was declared to be confirmed. Pressure was brought to bear on Madras by the Bengal Government to adopt the same policy and the Court of Directors sent out orders to this effect in 1795. The Madras Board, however, replied that it was hardly prepared to recommend the perpetuation of the settlement and

1795

required time for the collection of further information. In 1799 positive orders were issued from England that Lord Cornwallis' permanent system was to be adopted throughout the Madras Presidency. Eventually the Madras Government reported to the Supreme Government that it was possessed of materials for a permanent zamindari settlement in certain parts of the country. A special commission was appointed, and between the years 1802 and 1804 the northern districts of Madras were permanently assessed. The lands already in the hands of zamindars were confirmed to them in perpetuity, the assessment (peshkash) being fixed at two-thirds of half the gross produce estimated on an average of the previous thirteen years. That is to say, half the produce was to be left to the cultivator, one-sixth was to be the zamindar's share, and the remaining two-sixths was the Government revenue. The amount of the latter once fixed was unalterable, no increase ever being leviable on account of extension of cultivation to waste lands. The crown lands were parcelled out into estates of a convenient size, assessed in a similar manner and sold as permanently-settled revenue farms to the highest auction bidder. Regulation XXV of 1802 detailed the terms on which they held their property. In course of time, however, many of these artificially created estates came back to the hands of Government owing to failure of the purchasers, and the lands then became subject to the ordinary (temporary) settlement, there being none to re-purchase them. Though great numbers of zamindaris were sold for arrears, purchasers were generally found for them and they did not cease to be permanently-settled estates. Only in a comparatively few cases was there no purchaser, and then the lands were retained by Government as "Khās Mahāls," i.e., estates retained in the hands of Government.

1799

1802–1804

203. While these measures for the settlement of the more ancient territories of the Company were in progress, new territories were added to the Presidency, and the question of land assessment came up again for discussion in connexion with the part of the country ceded to the English in the south. In 1792 the first war with Tipu Sultān of Mysore placed a considerable tract of country comprising the present district of Salem, part of Madura, and Malabar in the hands of the British. The second war with Tipu added Kanara and Coimbatore. According to a treaty with the Nizam of Hyderabad in 1800, what are now called the Ceded Districts, viz., Bellary, Anantapur, Kurnool and Cuddapah, were ceded in perpetuity. In 1801 all the remaining possessions of the Nawab of Arcot in the Carnatic comprising the present districts of Nellore, North and South Arcot, Chittoor (excepting a portion), Madura, Rāmnād, Trichinopoly and Tinnevelly were made over to the British, thus carrying their possessions down to Cape Comorin. The State of Tanjore had been brought under British management in 1799 owing to the incapacity of its Hindu ruler. In the territory thus newly acquired, the same distinction was found as in the Northern Circars. That is to say, there were lands held by numerous chieftains (pālegārs) and lands held direct from Government.

The Ceded Districts, the Carnatic and Southern districts *1792–1801*

204. When these new districts had to be settled, officers of the Civil Service were not available, and the failure of management in the previously acquired tracts furnished additional reasons for the appointment of military officers, who knew the language and the country. Accordingly, Captain Read was sent to the Bārāmahāl, as Salem district was then called ; he had Munro and others as his assistants. Coimbatore was taken in hand in 1799 by two officers, who had been under Read. The settlement of the Ceded Districts was undertaken by Munro in 1801. The Carnatic districts were settled on similar general principles immediately afterwards. Practically all these early settlements were tentative arrangements which depended largely on what the settlement officers found practicable. The general idea was to make a permanent settlement, but with whom was not determined. Captain Read's instructions were to grant leases to the headmen or the chief inhabitants

The village-lease system *1798*

of each village, that is to say, one or more individuals were to be selected to hold the settlement and to pay, according to the terms of the lease, the amount that might be agreed upon as the revenue of the village. The leases were to be annual at first, but after sufficient information had been gathered, it was hoped that leases might be made for periods of five years. To begin with, Read offered terms to the headmen of single villages or groups of villages based on the recorded assessment of Haidar's reign corrected by comparison with accounts of actual cultivation. At the same time the interest of the cultivator was guarded and a detailed field survey was made. This led to the idea of assessing each field according to its quality and leaving the cultivator free to keep the field or relinquish it and take another. The survey was finished and the assessment on each field determined by the year 1798, and a proclamation was made setting forth the terms of the settlement, one of the conditions being that all the resident cultivators of a village should be jointly responsible for the revenue due on all the lands cultivated during the year.

Extension of permanent settlement *1803–1805*

205. This was not the kind of "village-lease" which the Board had intended, and an explanation was called for. Meanwhile Read was called away to the second Mysore war and the consideration of what had been done was suspended by the attempt to carry out the orders to introduce the permanent settlement. In accordance with the orders received in 1799 the Bārāmahāl was divided in the years 1803-1805 into numerous revenue farms which were sold by auction to the highest bidder. A great many of the farmers, however, failed in the second year after having pillaged the villages in their farms, and many estates fell into the possession of Government again. It became evident that the permanent settlement could not be carried out, and a return was made to Read's system, which was in fact a ryotwari settlement, i.e., a settlement with each individual cultivator (ryot). The estates held by a few of the pālegārs in the Ceded Districts and in the Carnatic districts were permanently settled, but in the majority of instances the pālegārs attempted to resist the British authorities in the hope of continuing the same lawless course of exactions and plunder that they had adopted before the annexation and were therefore destroyed or dispossessed.

Reversion to village-lease system *1808*

206. The attempt to create artificial estates, which were to be assigned in perpetuity subject to the payment of a fixed sum as peshkash or land-revenue, was a general failure, and at last it became apparent that the conditions of by far the greater part of the Presidency were unsuited to the introduction of the zamindari system. In 1808 the Government of Fort St. George determined to recur to the system of "village leases" in the districts in which the permanent settlement had not been established, and in which settlements were made with the individual cultivators and the revenue collected from them by Government servants on the principles worked out by Read, Munro and the men who had served under them. The chief objects of the change of system appear to have been economy and a desire to introduce a plan of settlement approximating to the zamindari settlement in perpetuity. Under the village-lease system the settlement was to be made with the village headman or with the general body of villagers, or failing them with a renter. The revenue due to Government was to be assessed on the average of the amount collected from the village in previous years. The leases were to be for triennial periods; they were afterwards made decennial. The great difference between this system and the ryotwari system was that under the latter the cultivators were at liberty to extend or curtail their holdings and were only responsible for the payment of the revenue assessed on the fields actually held by them; under the former the lessee had no power of relinquishing any portion of his holding during the currency of the lease. It was not a successful experiment on the whole. The most general cause of failure was over-assessment. Lessees could not be found for many villages, and in these the ryotwari system was continued.

Introduction of the ryotwari system

207. One great advantage of the ryotwari system was the opportunity it afforded of acquiring information respecting revenue matters, of ascertaining the dues of Government and the rights of the cultivators. The universal introduction of the zamindari system had been held in abeyance for fear of sacrificing the interests of Government in the then imperfect state of knowledge and the ryotwari system was discontinued in favour of the village-lease system before all the benefits it was capable of yielding had been realized. However in 1817 the Court of Directors issued instructions for the abolition of the village-leases and the re-introduction of the ryotwari system wherever practicable. At this period the zamindari system was in force in the districts of Ganjām, Vizagapatam, Gōdāvari, Kistna, Guntūr, Salem and Chingleput, in the permanently-settled estates of the pālegārs in parts of the Ceded Districts, Nellore, North and South Arcot, Chittoor (excepting a portion), Madura, Rāmnād and Tinnevelly. In the unsettled portions of the latter districts and in Tanjore and Trichinopoly the village-lease system prevailed. In Coimbatore, Malabar and Kanara the ryotwari system had been established. In Malabar and Kanara a class of landlords was found whose claims were so far recognized that they were allowed to retain a share in the produce. No survey was undertaken, the prevailing custom of measuring the land for purposes of assessment by the amount of seed required to sow it being recognized and adopted. In 1820 Munro became Governor of the Madras Presidency and took his seat in time to preside over the final establishment of the ryotwari system. The early ryotwari settlements had many defects. Restrictions were placed upon the relinquishment of land, and heavy assessments were imposed on garden lands, i.e., lands cultivated with special crops. The survey and settlement were conducted so rapidly that there were very great inequalities. The assessments were largely dependent not so much on the estimates of produce as on former assessments which had been run up to a high pitch under the Mysore Government or the Nawab. Such rates were liable to become unbearable when the selling price of grain became very low as it did for a number of years. Hence various devices were resorted to in order to mitigate the burden. All this has now given way to careful survey and deliberately framed and carefully equalized assessments. Garden lands have been classified and assessed as dry lands in all districts except Malabar and South Kanara, in which districts, owing to peculiar conditions of garden cultivation, it has been found necessary to assess gardens at special rates.

1817

Ryotwari settlement

208. Before proceeding to describe the machinery by which the existing settlements have been effected, the modern meaning attached to the term ryotwari settlement may be explained. It means the division of all arable land, whether cultivated or not, into "fields" and the assessment of each "field" at a fixed rate for a term of years. The "field" is an arbitrary area. There is no minimum size, but it is usual to fix a maximum which is at present 5 acres in wet and 10 acres in dry land. Where a survey-field comprises the holdings of two or more occupants it is sub-divided where such holdings are separately identifiable. Survey-fields may also be sub-divided to distinguish portions transferred or relinquished. The occupant pays the revenue so assessed on the area he actually occupies. This area may be constant or may vary from year to year with the relinquishment of old fields and the taking up of new ones. The occupant deals directly with the Government and is responsible only for his own holding. He is given a document called a patta, which sets forth the extent and assessment of each survey-field or portion of a field in his occupation. This patta is liable to revision every year, to bring it into accord with the actual state of affairs. The occupant thus enjoys all the advantages of proprietorship, subject only to the payment of the revenue due on the lands held during the year. The lands can be inherited, sold or burdened for debt in precisely the same manner as a proprietary right, provided that the person in whose name the land is registered in the Government accounts pays the revenue due to the State. The total

number of holdings under this system in the year 1920–21 was 4,861,789 with an average of 5·37 acres in each holding.

Institution of the Settlement Department

1855

209. In 1855, that is, a quarter of a century after the final adoption of ryotwari as the standard revenue system of Madras, less than a fifth of the area of the Presidency was cultivated, while more than half of the area recorded as arable was waste. Though the population had largely increased and there had been uninterrupted peace, there had in all these years been neither any material increase of revenue nor any extension of cultivation. The incidence of assessment was everywhere very unequal, while a succession of years of low prices had had the practical effect of raising rates which were already too high. It was calculated that on the average Government at that time took as their share 50 per cent of the gross produce of irrigated land and 35 per cent of that of unirrigated land, while, to give the ryot any real proprietary interest in the land and to induce an extension of cultivation, from 25 to 30 per cent of the gross produce was, it was thought, the utmost the Government should claim. The Presidency of Madras was also the only province of India in which no regular survey had been instituted. The early surveys, even the best of them, were defective. There were no maps and no permanent boundaries, and the records of the surveys, such as they were, had been but imperfectly preserved. These early surveys, moreover, extended to only a few districts of the Presidency, and there were districts in which the only records of the area liable to assessment were the unchecked entries in the accounts prepared by the village officers. On these and similar considerations, the Government

1855

determined in 1855 that a general revision of assessments should be made throughout the Presidency, founded on an accurate survey and a more or less exact classification of soils, which seemed the only right basis of a land-revenue settlement. The Government of India and the Home Government concurred in the necessity of the measure, and the Revenue

1858

Settlement Department was constituted in 1858 with Mr. Newill as the first Director. The Settlement Department at first undertook to demarcate the village and field boundaries. This was a tedious process involving much arbitration and the investigation of many disputes. The marks erected in many cases were temporary and destructible, and had frequently to be renewed by others of a more permanent nature. This unsatisfactory work continued to occupy much time and attention until the districts of Gōdāvari, Kistna, Guntūr, Kurnool, Nellore, Salem, Trichinopoly and Tinnevelly were demarcated and surveyed, when the demarcation of boundaries was made over to the Survey Department.

1864

This was in 1864. By the end of 1864 proposals for the revision of the settlement of the whole of Trichinopoly, of that portion of Kurnool known as Kurnool proper, of the Masulipatam portion of Kistna district, of one taluk of South Arcot, and of the western delta of Gōdāvari district had been worked out and submitted for the consideration of Government. The results of these operations of the department were not, in the opinion of Government, satisfactory. Its organization as a separate department, distinct from the local revenue establishments, was held to be defective, and the experience and knowledge of the district officers were lost, their interest not being enlisted. The personal supervision which the Director could exercise over the operations of scattered parties could be only nominal. The time available for ascertaining by experiment the productive powers of the soil was necessarily very limited, and the conclusions arrived at by the department had not, in this respect, commanded confidence. Much time and money were wasted over minute details of little practical value, while the really important work of a settlement was left too much to ill-paid subordinates. Except, therefore, in certain districts, where the work had already so far advanced as to make its continuance by the special department desirable, Government resolved to place all settlement operations under the immediate supervision of district officers controlled by the Board of Revenue. The new system was introduced in two districts—Tinnevelly and Nellore—the Collector of the

former being, from long experience as a settlement officer, especially qualified for the duty. But in Nellore the experiment resulted in failure. Settlement operations continued everywhere, except in Tinnevelly, under the control of the special department till the end of 1873, when the *1873* question of abolishing the department as a separate institution was again considered. The settlement of the whole of Trichinopoly, Kistna, Guntūr, Gōdāvari, Nellore and Salem districts, and of parts of South Arcot, Kurnool, Cuddapah and Tinnevelly had by that time been completed. The area settled by the department in these 15 years was 27,892 square miles, and the cost incurred, including demarcation, amounted to Rs. 42,84,775. The cost of settlement proper was Rs. 24,06,733 or Rs. 83 per square mile. There remained 26,146 square miles to be settled, and it was estimated that the time required to accomplish this would be 13 to 14 years. The decision given was in favour of the continuance of the department under a separate head. The department continued to be so administered till the latter part of 1879, when, in consequence of the financial exigencies of the *1879* Empire, the appointment of Director was abolished, and the strength of the department reduced by about one-half. The department was, under these altered conditions, administered by a member of the Board of Revenue. This arrangement lasted till the end of 1882, when the appoint- *1882* ment of Director was revived and conjoined with that of the newly constituted Directorship of Agriculture. But at the reorganization of the Board of Revenue in April 1887, the department was again placed under *1887* the direct charge of the Board, one of its members assuming the portfolio under the designation of the Commissioner of Revenue Settlement and Director of Department of Land Records and Agriculture. In 1903 the *1903* Survey Department was placed under the Commissioner of Revenue Settlement and his designation was changed into Commissioner of Revenue Settlement, Survey, Land Records and Agriculture. In 1920 his *1920* designation was again altered into "Commissioner of Land Revenue and Settlement."

Original scheme of survey and settlement

210. The scheme of survey and settlement as ordinarily sketched out is shown under the following 14 heads: (1) a revenue survey showing all the principal variations in the surface of the soil as hills, jungles, roads, channels, tanks, topes, houses, cultivable lands, and also exhibiting accurately the sizes of the fields in these last two classes of land; (2) the minimum size of fields was to be one acre of wet and two acres of dry land; interstitial holdings were to be treated as subdivisions of such fields; (3) permanent boundary marks were to be established, and field, village and taluk maps prepared; (4) assessment was to be ryotwar; (5) the terms of the annual settlement made with each ryot were to vary simply with the area or quality of the lands held by the ryot, and his use or non-use of water from a Government source; (6) soils were to be divided into a few classes based on differences of composition; (7) the settlement officer was to estimate, as nearly as possible, the productive power of the land, stated in quantities of some one of the ordinary grain crops—paddy for irrigated lands, and cumbu, cholam or some other grain for unirrigated; these estimates (grain outturns) were to form the basis of the ultimate assessment; they were to be carefully made on such a scale as would allow for indifferent crops and bad seasons; (8) the land was then to be valued with regard to nearness of village roads, markets, irrigation facilities, etc., and the field or village was to be classed accordingly; (9) the assessment was to be moderate; existing rates were generally based on 50 per cent of the gross produce for wet and 33 per cent for dry lands; Sir Thomas Munro's maximum was 30 per cent, and this was now adopted on the assumption that the average assessment would be about 25 per cent of the gross produce; (10) the ryot's payment was to vary every 7 or 10 years with the commutation price of the standard crop, to be calculated on the average of the prices prevailing during the previous 7 or 10 years; (11) it was believed that it would not be found necessary to divide the country for the purpose of official scales of prices, i.e., one scale was to apply to the entire Presidency

for the term adopted ; but this principle was abandoned in practice, and the commutation prices for each district have been calculated independently ; (12) the grain outturns were to be unalterable for a period of 50 years ; (13) it was to be open to the ryot to compound for a fixed annual payment for a term of years ; and (14) the Survey Department and the Settlement Department were to be separate, the former under a Surveyor-General, the latter under a Superintendent of Settlement. The total cost was estimated at Rs. 76½ lakhs, spread over a period of 15 or 20 years. But this estimate has been greatly exceeded. Up to 31st March 1922, the total expenditure on revenue survey has been Rs. 3,76,46,459, and on settlement Rs. 2,32,24,546 ; the result was expected to be an immediate loss of revenue consequent on the reduction of the Government share of the gross produce. But this was to be more than recouped by an extension of cultivation. This scheme was accepted in the main by the Court of Directors. Objections taken subsequently with regard to certain detailed points were decided at different times as enumerated below : (1) the restriction as to the size of fields has been removed ; the maximum was once fixed at 2 acres for wet and 4 for dry land, but now, as a rule, each revenue-field (i.e., each parcel of land on which previously a separate assessment was fixed) will form a survey-field ; in exceptional cases two or more revenue-fields may be clubbed together subject to the following conditions : (*a*) every survey-field so formed must consist of entire revenue-fields ; (*b*) no survey-field so united should exceed 5 acres of wet or 10 acres of dry land ; (*c*) the revenue-fields forming a survey-field should be held on the same tenure ; inam and ryotwari land should not be taken together ; (*d*) no existing revenue-field need be divided, however large ; (2) the assessment was to be made on the net produce, i.e., after deducting the expenses of cultivation and a percentage for vicissitudes of season, unprofitable areas, etc. ; in 1864, the Government share of the net produce was fixed by the Secretary of State at one-half ; (3) the term of settlement was to be 30 years, i.e., both grain outturns and commutation prices were to remain unalterable for that period ; subsequently it was decided that at each settlement or re-settlement of a district, Government would fix at their discretion the period for which such settlement or re-settlement should be in force, and on the expiry of that period Government would revise the assessment in such manner as might then seem just and proper either with reference solely to a rise or fall in prices or with reference also to other considerations such as would require a re-classification of soils or a re-calculation of the grain outturns ; (4) leases for a term of years at reduced rents were found to be unnecessary for the encouragement of large holdings ; (5) another important question which came up for disposal at the time of the initial settlement of the districts of Gōdāvari, Kistna and Guntūr was the method to be adopted in assessing the additional amount to be paid, over and above the land assessment, for water supplied from Government irrigation sources such as the Gōdāvari and Kistna canals ; in these districts it was decided to impose an uniform charge of Rs. 4 per acre for irrigation supplied for a single crop, in addition to the land assessment, which was determined as if the land was unirrigated ; it was desired to adopt a similar plan in all other districts where it was found practicable ; as a matter of fact, however, the only other district in which the system has been introduced is Kurnool, in some parts of which irrigation is supplied from a canal which was originally worked by the Madras Irrigation Canal Company under a guarantee from Government, and the principle was maintained when the Company's works were taken over by Government ; the land-assessments were fixed without reference to the facilities for irrigation ; in districts subsequently settled, the assessment on irrigated lands was determined by a consideration of the value of the paddy (rice) crop grown on the best irrigated land, gradations of rates being formed to meet the conditions of inferior qualities of soil or defects in the sufficiency or regularity of the water-supply ; this system of consolidated wet assessment was extended

Subsequent modifications

to the irrigated lands under the Gōdāvari, Kistna and Kurnool-Cuddapah canals at the re-settlements of those districts ; (6) formerly, it was the practice to charge the rates settled for irrigated lands, on lands irrigated by wells, where such wells were situated within a distance of ten yards of a Government source of irrigation, although Government had incurred no expense in sinking the wells ; the justification for this course was that the wells derived their water-supply by percolation from the Government source ; under recent orders, however, such lands are no longer assessed as irrigated, and the cultivator is allowed to enjoy the benefit of irrigation from his well free of any additional charge.

Constitution of the department

211. The department consists at present of five settlement parties under the control of the Commissioner of Land Revenue and Settlement. Each party is in the charge of a special settlement officer or special assistant settlement officer who is a member of the Indian or Provincial Civil Service temporarily deputed for settlement work. He is usually assisted by one or more special assistant settlement officers who are in the same manner drawn from the ranks of the Indian or Provincial Civil Service. The sanctioned cadre of a party usually comprises an uncovenanted assistant with a permanent office establishment costing on an average Rs. 844 a month and a supervisor with a field establishment costing on an average Rs. 2,058 a month, besides menials.

Procedure of settlement

212. The detailed operations performed by the Settlement Department in effecting the settlement of a district are the following.

Preliminary investigation

213. I. In the first instance it is necessary to obtain a general view of the characteristics of the district. Particulars of the climate, rainfall and physical features of the different tracts or divisions ; information relative to its past history, its years of plenty or famine, its land tenures, mode of taxation, and the causes of gradual progress has to be obtained from the Collector's records ; the relative values of such sources of irrigation as the various tracts possess have to be estimated ; a general idea of the prevailing soils must be acquired ; at the same time information is gathered as to how different tracts are affected by roads, canals, markets, towns, hill ranges or sea-board; the methods of cultivation pursued, the crops grown, the mode of disposal of surplus grain, the markets mostly frequented and the wages paid to labourers have to be inquired into.

Classification of soils

214. II. Soils were divided by Mr. Newill into five great series : (1) the alluvial and exceptional, which includes the rich soils in the deltas of the great rivers, garden and other soils, permanently improved by long working ; (2) the regar or regada, the so-called " black-cotton " soil ; (3) the red ferruginous soil, originating from sandstone, laterite, etc. ; (4) the calcareous soil, originating from underlying strata of chalk or lime (of rare occurrence) ; and (5) the arenaceous soil (more or less pure sand on the sea coast, etc.). These series were adopted because they answer the requirements of being few, simple and well-defined while they are universally acknowledged by the people themselves. Every soil of the series may contain varieties in physical constitution. Each one has some one distinctive mineral constituent which is capable of reduction to an impalpable powder. This contains the characteristic mineral nutritive element of the soil, and is for convenience (though not, of course, with scientific accuracy) spoken of as " clay." Now, each series may exhibit this material or " clay " either pure or mixed with sand (as loam) or mixed with an excess of sand (sandy soil) ; and the difference affects the value of the soil because it makes it heavier or lighter, more or less permeable, liable to cake, or able to retain moisture. Each series is thus divided into classes, the exceptional into two—" alluvial " and " permanently improved "—the others into three each, known as, " clayey," " loamy " and " sandy." The clayey soils of each series are those containing more than two-thirds of clay, the loamy soils those with one-third to two-thirds clay and the rest sand, and the sandy soils those with more than two-thirds sand. So far the classification of soils proceeds, under fixed rules, according to their mechanical composition. Allowance is

made for the presence of valuable or deleterious ingredients which affect the fertility of the soil, by the subdivision of each class into "sorts" according as the soil is "good," "bad," "ordinary," etc., of its kind. At first the number of sorts in a class was only two, but experience proved such a scale to be too inelastic and the number was increased first to three and then to five, viz., best, good, ordinary, inferior, worst. In determining the classification, the soil is turned up to the depth of about 9 inches. One yard is considered to be the proper depth for the surface soil; if it is less than this, the actual depth is noted as well as the nature of the sub-soil. Classification is made by classifiers under head classifiers and supervisors. The classification of each field is noted on the village map and in a register. It is usually found that soils run in considerable blocks round which a line can be drawn on the map. Inside the block small differences in a few scattered fields would be disregarded to avoid multiplying blocks.

Classification of fields

215. A revenue system based on field assessment seems to demand naturally and necessarily the separate classification of each individual field, and this is the sanctioned method of the department; it is at the same time laid down that, though the details of classification extend to each field, the wider comparative view of the operations should never be lost sight of, as it is most desirable that the land should be viewed in a comprehensive way by the classifier. The detailed method of classification excited opposition at a very early period of the history of the department. Objection was taken to leaving the classification to men on low pay and it was proposed that the system of detailed field classification should be replaced by a system of classification in blocks laid out by native officers, but valued by Europeans. It was pointed out in reply that the result would, in both cases, be practically the same, and the proposal was negatived as impracticable. The question was again revived in 1875, in connexion with the settlement of certain villages of the Chingleput district. The method advocated there by the Director was that the officer conducting the settlement should lay out the land in blocks so similarly circumstanced in regard to soil, former assessment, cultivation, distance from village, tank, etc., that they might be safely assessed at the same average rate. Under this system, the classifier, instead of preceding the head of the party, was to follow him, merely filling in details of registry for the lands inspected and laid out by the settling officer in consultation with the ryots. For this system it was claimed that fraud was almost impossible, while the officer conducting the settlement had, from first to last, a perfect knowledge of every detail of the country with which he was dealing, and could afford to dispense with the voluminous returns invented as checks on low-paid subordinates. As a method of work, the Government have disapproved of the plan, but encourage blocking as a sequel to field classification and as in fact an office arrangement made for the purpose of check and revision. In Malabar and South Kanara, however, blocking, even as a sequel to field classification, was not adopted as owing to the peculiar physical conditions of those districts the system was found to be inapplicable to them.

Grain outturn

216. III. The next stage is to ascertain what amount of crop each different class and sort of soil will produce. The same kind of crop is not always grown on the same soil nor on the same field from year to year. It is necessary, therefore, to choose one or more standard grains (always food-grains, as food-products are the ultimate standards of values) to represent the general or average produce. The crop most extensively grown on irrigated lands is paddy; on unirrigated (or dry) lands several varieties of food-grains are grown and the crop cultivated on the largest area according to the cultivation accounts is usually selected as the standard, or more often two crops are taken, the areas under other crops being for settlement purposes presumed to be cultivated with one or other of these according to the relative value of the crop. A fair average outturn of the standard grains is then ascertained per acre of each class and sort of soil, and this

is called "the grain outturn." The criterion of such outturns is experience, and this is sought in experiments by officers of the Settlement and Agricultural departments, in the knowledge acquired during long years of service by Tahsildars and similar responsible officers of Government, in the records of produce entered in the old village accounts, and in the admissions of the ryots. The actual experiments consist in reaping, threshing and measuring the crop upon small areas in selected fields. The number of experiments in some districts has exceeded two or even three thousand. The results are taken as a general guide to the grain outturns and no more. The experimental reapings (or *kails* as they were called) are now to a great extent given up in favour of recorded results.

Commutation price

217. The grain-outturns are next commuted into money. The commutation price is fixed on an average struck on the prices of a long series of years so as to ensure that the advantages of good and losses of bad years may be balanced, and to preclude all risk of the Government share of the produce being sold to the ryot at a price which he cannot always command; and a percentage allowance (formerly 10 and now generally 15 per cent) is made for cartage of grain to markets and for merchant's profits. For all the earlier settlements, the average taken was based on the prices of the 20 years from 1845 to 1864. But since 1885 the period has, under the orders of Government, been altered into the twenty non-famine years immediately preceding each settlement. From the results obtained by applying the commutation rate a deduction of from one-sixteenth* to one-fourth is usually allowed on account of vicissitudes of season, and in view of the fact that the survey areas of fields include small extents of uncropped land, such as field-ridges, irrigation distributaries, etc. Against the average value of the produce thus determined has to be set off the "cost of cultivation," the estimation of which used to be one of the most difficult and the most conjectural of the various steps in connexion with a settlement. The items of cost usually included in the estimate were (1) ploughing cattle, (2) agricultural implements, (3) seed, (4) manure, and (5) labour required for ploughing, sowing, reaping, etc. The method of calculation varied according to the description of crops grown, and the method of culture, as well as according to the mode in which these items were paid in each district. In some, payments are made in grain, in others in money, and in some in both grain and money. The payments made in grain were converted into money at the commutation price adopted for the settlement. The cost of bullocks and the implements of husbandry was distributed over the number of years during which they were estimated to be serviceable, and the other items were calculated for each year. Calculations were first made for the area which could be cultivated with one plough and one pair of bullocks, and the required calculations for an acre were deduced from them. The usual practice was to work out the expenses for the best soil, and then to diminish this standard proportionately according to the quality of soil. This method is open to objection on the ground that the cost of cultivating poor soils is greater if a maximum yield is sought therefrom than for superior soils. But it is to be borne in mind that the cultivator is content with a much smaller relative outturn from inferior soils and omits many processes such as repeated ploughings, manuring, weeding, and hoeing, which are resorted to on more fertile lands. Now the expenses of cultivation are taken to be the same as has been already determined in neighbouring settled districts. These expenses being deducted from the gross assets, i.e., the value of the total outturn, the result is the approximate net produce of the land under examination, and half of this or, more often, rather less than half is taken as the Government demand. The straw is usually taken as a set off against the item "feed of bullocks."

Cost of cultivation

* One-twentieth is allowed in the case of lands under first class sources of irrigation in Nellore.

Assessment

218. The principle has always been that the assessment is to be moderate. The old rates were generally based on 50 per cent of the gross produce for wet and 33 per cent for dry land. When revision began the maximum was reduced to 30 per cent, the average assessment being about 25 per cent. But in the course of time a gross produce percentage was not considered sufficiently accurate. Net produce was to be ascertained by deducting the cost of cultivation, etc., as explained in the last paragraph and in 1864 the Government share or revenue was fixed at half the duly ascertained net produce. Recent calculations have shown that the ryotwari revenue actually collected at the present time is less than 10 per cent of the gross produce.

Tarams

219. For the sake of simplicity and to avoid multiplication of rates, the classes and sorts of soil which have been found by experience to yield alike or very nearly so are arranged in grades called "tarams"; it follows that the values of half the net produce of the different classes and sorts of soil falling in the same grade are very nearly equal. Only one rate of assessment is therefore fixed for each grade, and, as far as possible, these rates are adjusted, so that the descent from the highest to the lowest may be by a uniform amount in each grade. As soils possess different productive powers when irrigated and dry, it is necessary to adopt two scales of tarams, one for wet lands and another for dry lands. A third scale of rates is necessary for the garden lands in Malabar and South Kanara. As all villages have not the same advantages in respect of proximity to markets, facilities of communication, e.g., roads, canals, railways, means of irrigation, or position with regard to the sea, or rivers, or hills, and the character of the subsoil, inequalities would arise if the same set of wet and dry rates were applied throughout the tract under settlement. Villages are, therefore, arranged in groups, generally two or three for a district according to circumstances, and the irrigation sources are arranged in classes; the rates of assessment are worked out as detailed above for the lands in the normal group of villages and under the normal class of irrigation, and are applied to those in the other groups and classes by being raised or lowered one grade as the case may be. Thus, the rate of assessment on good loamy black-cotton soil under first-class irrigation would be the same as that on the best loamy black-cotton soil under second-class irrigation. If sufficient water is obtainable, two crops of paddy are frequently grown on wet lands. In such cases, a charge equal to half the original assessment is made for the use of the additional supply of water. On unirrigated lands, the fixed assessment remains unaltered, whatever the number of crops raised may be, unless water be taken to irrigate a crop from a Government source, in which case a charge is made for the water so taken. Deductions are allowed if water has to be raised on to the fields by mechanical contrivances. No extra assessment is levied on account of the existence of wells whether in wet or dry lands.

220. The practical results of the development of this system are that there are at present 89 rates in the wet scale ranging from Rs. 15 to As. 12 per acre and 61 in the dry varying from Rs. 11 to As. 2 per acre. In Malabar there are 7 garden rates ranging from Rs. 7 to Re. 1 per acre. At one time it was thought possible to draw up standard tables of rates including all classes and sorts of soil which could be re-applied at once to each field in a district as soon as the classification of the soil was known. It was suggested that instead of laboriously working up, as theretofore, to a table of rates, settlement operations in a new district should commence with the determination of such a table of rates as, on consideration of the general conditions of the district and of the rates adopted in other and neighbouring settled districts similarly conditioned, might be deemed suitable. In pursuance of this suggestion, a standard table of rates, in which were embodied the more salient features of every settlement that had been made, was drawn up. Subsequently in 1884, when submitting proposals for the settlement of the Madura district,

Mr. Wilson, the Director of Settlement, tested this standard scale by working out rates for each class and sort of soil, taking the outturn and cultivation expenses from the sanctioned settlements of adjoining and similarly situated districts, and the commutation rates from the price returns of Madura district. The result showed that the process of verification adopted by the Director could not with safety be omitted. It was, therefore, resolved that for each district, the settlement of which is taken up in future, an independent scale should be worked out on the data supplied by the settlements of other similarly situated districts without reference to a standard scale.

Scheme of settlement

221. The rates so determined and applied to the survey areas placed under each class and sort of soil give what are called the financial results of the new settlement for a village, taluk or district. Upon these data a scheme of settlement is drawn up by the settlement officer, in which he enters into full particulars of the political and revenue history of the tract or district under report, gives details of the physical features of the country, goes into statistics and resources, and discusses the several processes worked out by him in arriving at the results indicated above. He then argues as to the fairness of the revision of assessment proposed by him, and explains the causes which influenced the enhancement or diminution in assessment. These proposals are reviewed and revised, if necessary, by the Board of Revenue and Government. When a scheme of settlement has received the sanction of Government, a notification giving a brief summary of the principles on which the new money rates were worked out is prepared and published in the District Gazette.

Increment remissions

222. In introducing the new rates the ryots are granted "increment remissions" in cases where the new assessment is greater than the old beyond a certain percentage; if the increase in individual cases exceeds 25 per cent of the old assessment, the old assessment *plus* 25 per cent of that assessment is levied in the first year and the remainder remitted; in subsequent years, the assessment levied in the immediately preceding year *plus* 12½ per cent of the old assessment is levied and the remainder remitted. If the full amount of the new assessment cannot be reached by the twelfth year, the balance remaining after levying 25 per cent in the first year will be levied in equal instalments in the succeeding eleven years. Increases of Re. 1 and less will be levied in the first year whatever the percentage may be.

Final operations

223. Certain subsidiary matters connected with the assessment then receive attention. For instance, the area to be registered as entitled to irrigation under each source is finally revised, extended or curtailed as the state of water-supply renders it necessary. The interstitial holdings included by the Survey Department in a single survey field are measured and distinguished by separate entries in the accounts. Opportunity is also taken to divide common lands, to allot grazing grounds, and to transfer lands improperly assessed as "wet" to "dry" and vice versa. After the completion of these preliminaries, tickets, otherwise called rough pattas, are distributed to the ryots. On a fixed day, those who have cause for complaints appear with their village officers before the settling officer, and their complaints, as redressed or rejected, are entered in the settlement diary. The accounts are then corrected with reference to this final settlement, and the completed registers of each village are printed.

The settlement register

224. This register, called the *Settlement Register*, is the foundation on which the whole revenue administration rests. It forms a complete "Domesday book" recording accurate information regarding every separate holding, large or small. The area of each field is given in acres and cents or hundredths of an acre, and the assessment thereon is noted against it. A single field on the survey map may actually be divided amongst twenty ryots. In such a case there will be twenty sub-letters, and each ryot will have a separate sub-line in the register giving full particulars of his *holding*, even though the extent of it be no more than one-hundredth

part of an acre. From the register is prepared a ledger known as the *chitta* which gives each ryot's personal account with Government. Every field or fraction of a field held by the same ryot is picked out from the settlement register, and entered in this ledger under his name with particulars of the area, assessment and other details. The total of the areas shows the extent of his different holdings in the village, and the total of the assessments is the amount due thereon by him to Government. A copy of this, his personal account, is given to each ryot with a note as to the date on which each instalment falls due and is known as his *patta*. An English descriptive memoir giving full details touching each village and its settlement, and an account of all lands held tax-free or on favourable tenure is also printed. A sketch map of the village showing the tanks and channels, and all similarly assessed fields laid out into blocks is attached to it. The descriptive memoirs of all the villages in each taluk consecutively numbered are bound into one or more volumes with their respective sketches and thus supply complete information regarding every village.

Pattas

225. The introduction of settlement is effected by the issue of pattas to those entitled to them, and this is one of the most important parts of the process of settlement. In the districts first settled, it was thought sufficient to issue pattas in the names of persons entered in the accounts as they then stood, but latterly more has been done and many thousands of pattas have, after due enquiry, and where no civil disputes arise, been changed from the names of deceased ryots or vendors to those of the actual occupants of the lands exhibited in them. As an average district contains 157,000 Government ryots and 1,075,000 fields, these proceedings have involved considerable labour. It may be noted that a settlement imposes not only an acreage charge on the lands then in a ryot's holding but fixes the charge on each acre of waste land which is likely to be cultivated or occupied at a subsequent time.

Jamabandi

226. The duration of the settlements and re-settlements hitherto carried out is 30 years. During that period, neither the grain outturns nor the commutation rates are altered. But, as under the ryotwari system each cultivator is free to hold or relinquish whatever fields of his holding he likes, or to take up other available fields, and as, in the circumstances already described, deductions are sometimes made from his total assessment, there must be an annual settling up to show what lands each ryot has actually held, and what amount, on all accounts, he has actually to pay for the year ; his patta may be revised or he may, if necessary, be given a fresh patta every year. This process, which is called the annual settlement or *jamabandi*, is conducted not by the special department but by the ordinary revenue staff. In this way the information recorded in the settlement registers is periodically corrected, so that when the existing settlement expires and revision becomes requisite, it will in general be necessary merely to determine what the revised rates of assessment shall be, and to substitute these for the existing rates entered in the village accounts.

Re-settlement

227. Initial settlements having been carried out in all districts throughout the Presidency, the operations to be carried out in the future will be almost entirely re-settlements. A re-settlement consists in a revision of the rates of assessment which were calculated not on holdings but on fields which may now be in the same or in different holdings. In revising these rates, changes in prices, in means of communication, in the accessibility of markets and in the quality of the irrigation sources since the original settlement are taken into consideration, together with any other indications of economic progress or retrogression. As a rule, the rates are raised or lowered all round in defined tracts by the same percentage. A re-settlement may also be made by re-modelling the original settlement by a re-classification of soils and the application of a new set of money rates based on a fresh calculation of grain outturns, cultivation expenses, etc. The districts of Trichinopoly, Gōdāvari, Kistna, Guntūr,

Nellore, Salem, Kurnool, Chingleput, Cuddapah, Tinnevelly, Ganjām, Coimbatore, Rāmnād, North Arcot, Chittoor, Madura (except Kodaikānal), Vizagapatam, the major portion of South Arcot and the Kadiri taluk of Anantapur have been re-settled up to the present. The deltaic portions of the first four districts, the Berhampur taluk of the Ganjām district and the wet lands in the districts of Kurnool and Cuddapah, in the Periyār tracts of Madura and in the area commanded by the new Nagavalli anicut in the Vizagapatam district were re-classified and the new rates based on the results of the re-classification were introduced. In the remaining tracts, a percentage enhancement was made in the existing rates with reference to the rise in prices. The time for re-settlement has already arrived in portions of Bellary and Anantapur and in the Nilgiri and Malabar Wynaads and in the course of the next ten years the fixed period will expire in Tanjore, Gōdāvari, Kistna, Trichinopoly, the Kodaikānal taluk of the Madura district and portions of South Kanara, Malabar and the Nilgiri upper plateau ; in the last-mentioned tract the term of the present settlement was extended by 20 years.

The remission rules

228. From what has been said above, it will be seen that, in the various calculations made in fixing the final money rates on each field, allowances are made for seasonal failure and various other agricultural risks. As a matter of policy, however, remissions, either total or partial, of these rates are granted, as a matter of grace, under executive instructions in cases of loss of crop. Such remissions have occasionally been allowed to cure mistakes in assessment, which the utmost care cannot always prevent ; but relief on this ground is rarely required since Government are always ready and willing to correct, after a settlement has been introduced, any error which, in particular instances, may have led to over-assessment. The circumstances which render the grant of remissions expedient are the frequency of droughts or of immoderate rain, the enormous number of petty holdings, the improvidence of a large proportion of the cultivating class, and the undesirability of keeping arrears hanging over their heads for a series of years. Owing to the multiplicity of holdings and the general numerical weakness of the revenue staff, enquiry into individual losses is often impracticable : and relief can usually be rendered only where the loss of crop can be readily located, estimated and verified : and it is essential that it should reach the ryot. These considerations have been kept in view in the rules actually issued from time to time. In the case of wet land which is of comparatively limited area and productive of comparatively valuable crops, total failure of the crop over the plots registered in the accounts and demarcated on the ground as separate fields, is a fact readily ascertained and verified ; and the rules empower the Collector to remit the assessment in such cases in all years. In the case of failure, total or partial, of crops on dry land and in the case of partial failure in wet land, whether this takes the form of an indifferent yield over a whole field or of a total failure of crop in parts of a whole field, the loss in particular fields is not only difficult to ascertain but its determination by subordinate officials is not susceptible of any satisfactory check. To meet these cases, therefore, an allowance is made at settlement in reduction of the assessment which practically meets the losses of all but exceptionally unfavourable seasons. To provide for the calamities of exceptionally bad years the rules allow of a proportionate remission of assessment uniform over tracts where the crops have suffered in a marked degree. The remission rules as stated above are executive instructions, liable to be altered from time to time at the pleasure of the Government.

Settlement of inam claims

229. The settlement as described above only applies to the land under ryotwari tenure. If, however, there is land in the village, consisting of a few fields, or even a division of the village, held revenue free, or at a reduced rate, such an area is shown in the village registers. But it may be that a whole village is *inam*. If so, it constitutes a separate estate, and does not come within the scope of the settlement. Government has no claim to the land, or to the revenue unless there is a fixed quit-rent,

which is recorded, as is the permanently-settled revenue or "peshkash" of the zamindari estate. There was accordingly a special Commission, under which the right and title of the holders of these favoured estates was investigated and settled.

Land revenue

230. The demand of land revenue for the fasli ending 30th June 1921 under the different kinds of settlement above described was as under :—

	RS.
Zamindari	49,86,673
Ryotwari including miscellaneous revenue	6,27,73,560
Whole inam villages	7,56,020
Minor inams	23,34,275
	7,08,50,528

Cost of settlement operations

231. The following statement exhibits the expenditure incurred in each district by the Survey and Settlement departments from the commencement of the operations up to the end of the official year 1921–1922 and the financial results of the ryotwari settlement for the revenue year ending with 30th June 1921 in the districts in which the operations of these departments have been completed. There was a net increase of nearly 133 lakhs of rupees in the revenue, i.e., a return of nearly 25 per cent on the outlay :—

Districts.	Years of settlement or re-settlement.	Outlay.		Financial results.		
		Survey Department.	Settlement Department.	Demand prior to introduction of settlement.	Demand in fasli 1330.	Increase or decrease.
Original settlement completed.		RS.	RS.	RS.	RS.	RS.
Ganjām	...	10,85,864	3,96,412	...	...	...
Vizagapatam	...	7,25,287	1,48,414	...	...	...
Gōdāvari	...	6,87,214	3,36,120	...	...	...
Gōdāvari (rented and hill villages)	...	56,003	4,043	...	...	...
Kistna	...	10,29,050	6,06,515	...	...	...
Nellore	...	6,33,447	6,11,003	...	...	...
Kurnool	...	10,42,452	5,59,879	...	...	...
Bellary	1890–94	12,05,060	4,99,233	13,30,282	16,41,579	+ 3,11,297
Anantapur	1882–83, 1891–92 and 1896–98	10,24,950	5,18,816	(*a*) 10,39,869	12,84,784	+ 2,44,915
Cuddapah	...	15,23,614	12,73,729	...	...	...
North Arcot	...	8,77,839	9,36,028	...	...	...
North Arcot (hill villages)	...	20,561	...	...	...	...
North Arcot and Salem (Javadi hill villages)	...	...	397	...	...	...
Chingleput	...	9,51,957	4,36,029	...	...	...
South Arcot	1887–89 and 1890–93.	11,96,181	7,81,845	35,84,962	47,74,573	+ 11,89,611
South Arcot (hill villages)	...	...	...	...	...	...
Tanjore	1893–94	14,51,047	9,38,748	41,52,855	58,90,397	+ 17,37,542
Trichinopoly ...	...	3,16,208	3,87,415	...	...	...
Trichinopoly (hill villages)	...	...	...	...	...	...
Madura	1885–89 and 1892–93.	13,98,134	5,40,819	(*b*) 16,69,449	29,47,669	+ 12,78,220
Tinnevelly	...	9,55,453	7,06,607	...	...	...
Salem	...	8,79,623	6,19,708	...	...	...
Salem (hill villages) ...	...	89,030	...	...	...	...
Coimbatore	...	15,03,101	7,43,387	...	...	...
Coimbatore (hill villages)	...	1,23,736	...	...	...	...
The Nilgiris (including Wynaad)	1881–87 and 1889–90.	11,11,207	1,31,570	77,329	1,36,371	+ 59,042
Malabar (proper) ...	1900–05	16,02,475	14,75,336	(*c*) 17,60,497	33,51,653	+ 15,91,156
Malabar (janmam registration)	...	1,00,595	...	...	...	...
Malabar (Wynaad) ...	1888–89	8,12,858	1,67,014	82,654	1,40,140	+ 57,486
Anjengo	1904–05	...	7	...	...	...
South Kanara	1903–19	9,59,568	7,62,983	14,28,484	24,85,372	+ 10,56,888
	Total ...	2,33,62,514	1,35,82,057	1,51,26,381	2,26,52,538	+ 75,26,157

(*a*) Includes the figures for the Kadiri taluk transferred from the Cuddapah district.
(*b*) Do. portion transferred to the Rāmnād district.
(*c*) Do. Anjengo district.

Districts.	Years of settlement or resettlement.	Outlay.		Financial results.		
		Survey Department.	Settlement department.	Demand prior to introduction of settlement.	Demand in fasli 1330	Increase or decrease.
Re-settlement completed.		Rs.	Rs.	Rs.	Rs.	Rs.
Ganjām	1909-10, 1910-11, 1913-14, 1914-15 and 1918-19 ...	6,07,281	6,96,439	6,66,409	11,29,397	+ 4,62,988
Vizagapatam	1919-20	64,008	2,31,550	5,23,980	5,94,760	+ 70,780
Gōdavari ...	1899-1900	3,79,793	5,34,719	(a)35,02,221	22,20,199	− 12,82,022
Kistna (Masulipatam portion).	Do.	6,68,854	3,83,522	12,90,807	41,06,207	+ 28,15,400
Guntūr	1904-05 and 1906-07.	6,81,014	2,29,669	39,60,145	50,73,657	+ 11,13,512
Nellore	1906-07	7,64,145	2,59,274	19,79,435	23,49,524	+ 3,70,089
Kurnool...	1905-07, 1906-07 and 1909-10	7,58,863	4,35,704	15,60,350	16,84,864	+ 1,24,514
Anantapur (Kadiri taluk).	1913-14	2,16,837	16,154	Figures included in those shown against Anantapur above.		
Cuddapah	1907-08, 1908-09, 1910-11 and 1911-12	6,42,244	4,30,224	(b) 18,40,991	13,51,664	− 4,89,327
Chittoor	1912-13, 1913-14, 1914-15 and 1915-16	7,08,733	4,75,790	6,84,579	8,01,203	+ 1,16,624
North Arcot	1906-07, 1913-14, 1914-15, 1915-16 and 1919-20 ...	11,76,023	5,48,469	27,93,395	31,57,198	+ 3,63,803
Chingleput	1909-10 and 1910-11.	6,27,744	4,81,072	18,12,739	21,03,071	+ 2,90,332
Trichinopoly	1894-95 and 1910-11.	8,73,820	2,56,979	16,21,577	26,70,383	+ 10,48,806
Rāmnād	1911-12, 1912-13, 1918-19 and 1920-21	2,96,803	9,338	...	6,06,463	+ 4,39,940
Tinnevelly	1908-09, 1909-10, 1910-11 and 1911-12	8,77,212	9,31,443	(c) 28,40,757	26,74,234	+ 4,39,940
Salem	1904-05 and 1906-07.	3,80,108	4,03,988	(d)20,36,737	22,02,174	+ 1,65,437
Coimbatore	1909-10, 1910-11, 1911-12 and 1912-13	4,22,997	6,67,470	(e) 29,21,211	30,79,094	+ 1,57,883
	Total ...	1,01,46,479	69,91,804	3,00,35,333	3,58,04,092	+ 57,68,759
	Grand Total ...	3,35,08,993	2,05,73,861	4,51,61,714	5,84,56,630	+ 1,32,94,916

(a) Includes the figures for the taluks transferred to the Kistna district.
(b) Do. taluks transferred to the districts of Chittoor and Anantapur.
(c) Do. taluks transferred to the Rāmnād district.
(d) Do. taluk of Tiruppattūr transferred to the North Arcot district.
(e) Do. Karur taluk transferred to the Trichinopoly district.

232. With the exception of Regulation XXV of 1802, under which the permanently-settled estates were constituted, there are no legal enactments specially affecting settlement officers. They work under departmental rules. The jurisdiction of Civil Courts over questions affecting the rates or amount of assessment is saved by section 58 of Act II of 1864 (The Revenue Recovery Act). Law

CIVIL DIVISIONS OF THE BRITISH TERRITORY

The Province
5 & 6 Geo. 5, c. 61; 6 & 7 Geo. 5, c. 37; and 9 & 10 Geo. 5, c. 101

233. The power to declare, appoint or alter by notification the territorial limits of a province is vested in the Governor-General of India in Council, but the Secretary of State has the power to disallow any such notification; if, however, an entire district is transferred from one province to another, the previous sanction of the Crown is necessary to render the notification valid.

The scheduled districts

234. The scheduled districts include the Agency tracts in Ganjām, Vizagapatam and Gōdāvari and the Laccadive Islands and Minicoy. The Agency tracts have now been constituted into a new division called the Agency division and placed in charge of the Agency Commissioner, who corresponds directly with the Government. Information regarding the area, population, etc., are given in the statement in Appendix II at the end of this section.

General administration

235. The jurisdiction of every member of the Board of Revenue extends over the whole Presidency; there are no officers corresponding to Commissioners in other provinces who have control over several districts. The Presidency, excluding the Agency Division, is divided into twenty-six districts for the purpose of general administration, each under the charge of a Collector who is also the District Magistrate of the district in which he is employed, except in the case of Madras, where the Presidency Magistrates exercise the functions corresponding to those of District Magistrates in the mufassal. The Agency Commissioner is the Collector, District Magistrate and District and Sessions Judge of his division. The Agency Division and the districts are divided into "divisions" and "taluks." The tables given in the appendix furnish details relating to districts, divisions and taluks, and show what groups of districts are included in such terms as "the Northern Circars," "the Ceded Districts," etc. A few remarks about the area and population of the districts will be found in Chapter VI (Details of Census). In some taluks a portion of the taluk is placed under the charge of a Deputy Tahsildar. Each taluk is divided into three or more "firkas." The absolute unit for administrative purposes is the village; a village has definite boundaries fixed by Government; it may contain one or more hamlets and it corresponds to some extent to a parish in England. A district surveyor is generally employed in each district under the orders of the Collector.

Protection
Police

236. For the administration of the Police Department, the Presidency, excluding the City of Madras, is divided into four ranges, each under a Deputy Inspector-General of Police as shown below:—

Northern Range.	Central Range.	Southern Range.	Western Range.
Ganjām.	Guntūr.	Chingleput.	Salem.
Vizagapatam.	Nellore.	North Arcot.	Trichinopoly.
Gōdāvari.	Kurnool.	South Arcot.	Coimbatore.
Agency.	Bellary.	Tanjore.	The Nilgiris.
Kistna.	Anantapur.	Madura.	South Malabar.
	Cuddapah.	Rāmnād.	North Malabar.
	Chittoor.	Tinnevelly.	South Kanara.

Each district is under the charge of a Superintendent who is responsible to the District Magistrate for the working of the police in the district and several of the District Superintendents have officers of the rank of Deputy Superintendent as Personal Assistants. There are also in most districts Assistant or Deputy Superintendents in independent local charges under the general control of the District Superintendent. The City of Madras is under a Deputy Inspector-General who is styled the Commissioner. He has more extended powers than a District Superintendent and is assisted by two Deputy Commissioners of the rank of District Superintendent and two Assistant Commissioners of the rank of Deputy Superintendent. Two officers of the rank of Superintendent have the charge of the police on the railways and are under the

administrative control of the Deputy Inspector-General, Railways and Criminal Investigation Department, who deals with all matters concerning habitual offenders and criminal tribes. The backward tracts, known as the Agency, are placed under the charge of one District Superintendent of Police assisted by seven officers, including one Personal Assistant of the grade of Assistant or Deputy Superintendent of Police.

Criminal justice

237. The limits of the jurisdiction of the High Court may be altered by an order of the Governor-General in Council, but the Crown may disallow any such order. Its appellate and revisional jurisdiction over the ordinary courts extends throughout the Presidency. The High Court exercises ordinary original criminal jurisdiction in the Presidency Town. In every other district there is a Sessions Judge except in the Nilgiris, where the Sessions Judge of Coimbatore exercises criminal jurisdiction and the District Magistrate of the Nilgiris exercises the powers of an Additional Sessions Judge. In Malabar there are two Sessions Judges, one for North Malabar and the other for South Malabar ; and in Tanjore there is one Judge for West Tanjore and another for East Tanjore. The District Collector is also District Magistrate in all districts except Madras ; the Presidency Magistrates exercise jurisdiction within the Presidency Town, the limits of which can be extended by a law made by the Governor in Council. Divisional Officers are Subdivisional Magistrates for their divisions and the criminal jurisdiction of sub-magistrates is generally coterminous with a taluk or a portion of a taluk.

28 & 29 Vic., c. 15
India Act X of 1897
55 Geo. 3, c. 84

Prisons

238. There are no officers intermediate between the Inspector-General of Prisons and the Superintendent of Jails.

Civil justice

239. The appellate jurisdiction of the High Court as a civil court is coterminous with the Presidency, but in certain cases tried by the Court of the Agency Commissioner in the scheduled districts, the appeals lie to the Governor in Council and not to the High Court. The latter exercises ordinary original civil jurisdiction within the limits of its ordinary original criminal jurisdiction. Elsewhere Sessions Judges are District Judges for the areas within their criminal jurisdiction. In a few districts Subordinate Judges are appointed with jurisdiction over portions of the district. The local jurisdiction of the Madras City Civil Court and of the Madras Small Cause Court is the same as the ordinary original civil jurisdiction of the High Court. There are 171 District Munsifs : there is only one District Munsif in the Nilgiri district, but there are fourteen in South Malabar ; there are usually six or seven under each District Judge.

Registration of assurances

240. Except in the case of the districts mentioned below there is a District Registrar of Assurances for each district. There is only one District Registrar for the two districts of Madras and Chingleput. On the other hand, there are three District Registrars for the Malabar district (one at Tellicherry, another at Calicut and the third at Palghat, the last mentioned officer with jurisdiction over the district of Anjengo), two for the Tanjore district (one at Tanjore and the other at Negapatam), two for the Tinnevelly district (one at Tinnevelly and the other at Palamcottah) and two for the South Arcot district (one at Cuddalore and the other at Villupuram). There are two District Registrars for the districts of Coimbatore and the Nilgiri, one at Coimbatore with jurisdiction over the Nilgiri district and a portion of the Coimbatore district and the other at Erode with jurisdiction over the remaining portion of the Coimbatore district. The District Registrars of both the districts of Madura and Rāmnād have their headquarters at Madura, one with jurisdiction over the revenue district of Rāmnād and a small portion of the Madura district and the other with jurisdiction over the remaining portion of the Madura district. The District Registrars are directly subordinate to the Inspector-General of Registration. There is, generally, a Sub-Registrar's office at the headquarters of each Tahsildar or Deputy Tahsildar.

Local boards

241. The area under a district board is ordinarily identical with the revenue charge held by the Collector. The area under a taluk board is

134055

usually coterminous with a revenue divisional charge, but taluk boards have been constituted for single revenue taluks in some districts with a view to facilitate administration. There are no taluk boards in the Nilgiris district. The areas under the control of district and taluk boards are notified by the Government and those under the control of union boards are notified by district boards with the approval of the Government. Under the Madras Local Boards Act, 1920, no village or portion of it can be constituted into a union unless it has a population of 5,000 or more.

Municipalities

The boundaries of the City of Madras and those of any district municipality may be defined or altered by the Government.

Military (Auxiliary and Territorial forces)

242. For the purposes of inspection, Auxiliary Force units in the Madras Presidency and in the States of Travancore and Cochin are under the General Officer Commanding, Madras District. Auxiliary Force units in the Bangalore (Civil and Military station) area, in the Kolar Gold Fields area and in Coorg and Mysore are under the Bangalore Brigade area. Indian Territorial Force units in the Madras Presidency and Coorg are under the General Officer Commanding, Madras District.

Marine

243. The Presidency Port Officer is the marine adviser to the Governor in Council and exercises administrative control over the conservancy of all the ports in the Presidency, except Madras, subject to the Indian Ports Act, 1908. The local port officers stationed at other ports are officially under his control. The Port of Madras is under the control of a Board of Trustees constituted under the Madras Port Trust Act II of 1905.

Production and distribution

Forests

244. For the administration of the Forest Department, the Presidency is divided into six "circles." The first circle includes the districts of Ganjām, Vizagapatam, Gōdāvari and Kistna; the second circle comprises Guntūr, Kurnool, Bellary and Anantapur; the third circle contains Cuddapah, Nellore, Chittoor, Chingleput and a portion of the North Arcot district; the fourth circle includes the remaining portion of the North Arcot district, Salem and Trichinopoly; Madura, Tinnevelly and Coimbatore form the fifth circle, while the Nilgiris, Malabar and South Kanara constitute the sixth circle. There is usually one District Forest Officer in each district, but there are three in Kurnool, Cuddapah, North Arcot, Salem, Coimbatore and Malabar and two in each of the districts of Gōdāvari and South Kanara where the forest area is extensive. For Rāmnād and Tinnevelly one District Forest Officer is appointed. Other Assistant and Extra Assistant Conservators are sometimes given local charges under the control of the District Forest Officer who is regarded as a forest assistant to the District Collector.

Agriculture

245. For the administration of the Agricultural Department, the Presidency is divided into eight circles, each in charge of a Deputy Director of Agriculture. The first circle comprises the districts of Ganjām, Vizagapatam, Gōdāvari and the five northern taluks of the Kistna district. The districts of Guntūr and Nellore and the remaining taluks of Kistna form the second circle. The Ceded Districts form the third circle and the fourth circle includes North and South Arcot, Chingleput and Chittoor. Tanjore and Trichinopoly make up the fifth circle and Madura, Rāmnād and Tinnevelly the sixth circle. The West Coast districts are included in the seventh circle, while the eighth circle consists of Salem, Coimbatore and the Nilgiris.

Veterinary

246. For purposes of Veterinary administration, the Presidency is divided into two divisions, the first division comprising all the Telugu districts and the second division the Tamil districts. There are four Deputy Superintendents, two under each of the superintendents and their respective areas of operation embrace roughly the Ceded Districts, the Northern Circars, the Central and Eastern Tamil districts and the Southern and West Coast districts.

Co-operation

247. For the organization and development of co-operative societies, the Presidency is divided into twenty-two sections, each ordinarily covering a revenue district, with the exception of the Chingleput, Coimbatore and

Malabar sections which include, respectively, Madras, the Nilgiris and Anjengo districts and of the Madurā and Tinnevelly sections, each of which includes a portion of Rāmnād. Under each section officer, styled Assistant Registrar, there are chief inspectors and inspectors, the former, one for each section and the latter, generally one for a taluk.

Factories

248. For the administration of the Factories Department, the Presidency is divided into three Factory Inspector's circles—northern, central and southern—with headquarters at Bezwada, Vellore and Trichinopoly, and a headquarters circle consisting of Madras, Chingleput and Nellore under the Chief Inspector who exercises jurisdiction over the whole Presidency. Roughly speaking, the northern circle includes the Northern Circars, the central circle comprises the Ceded districts and the Central districts as far south as Tanjore and the southern circle includes the Southern and Western districts.

Public works

249. For the purposes of the Public Works Department, the Presidency is divided into seven circles, each under the charge of a Superintending Engineer. The I circle includes the Ganjām, Vizagapatam and Gōdāvari districts. The districts of Kistna and Guntūr constitute the II circle. The III circle comprises the Ceded districts and the whole of the Chittoor district. The Nilgiris, the West Coast, Coimbatore and Salem are included in the IV circle; Nellore, Madras and Chingleput districts form the V circle. The districts of Trichinopoly, Madura, Rāmnād and Tinnevelly constitute the VI circle and the districts of Tanjore, North Arcot and South Arcot are included in the VII circle. Each circle is divided into divisions, a division being generally a revenue district; but there are four divisions in Gōdāvari, three in Kistna and two in Tanjore on account of the delta irrigation systems, while on the other hand the two West Coast districts constitute one division, and the district of Anantapur is included in the Madanapalle division. The Nilgiri district was also included in the Coimbatore division up to March 1920 when a temporary division was constituted for the district. Portions of the Rāmnād district are in the Madura and Tinnevelly divisions. Divisions for the investigation and execution of tank restoration work exist in the I, IV, VI and VII circles.

Revenue and finance

Salt, Abkāri and Separate Revenue Department

250. The land revenue of each district is collected and administered directly by the Collector, his Divisional Officers and Tahsildars. For the administration of the Salt and Abkāri Department, the whole Presidency is divided into three divisions, each in charge of a Deputy Commissioner. The Northern division comprises the Northern Circars and the Nellore district; the Central division comprises the Ceded districts and the districts of Madras, Chingleput, South Arcot, North Arcot, Chittoor and Salem; the rest of the Presidency constitutes the Southern division. Each division is further subdivided into three subdivisions in charge of Assistant Commissioners. These subdivisions, which vary considerably in size, are again divided into circles, of which there are now seventy-eight, in charge of Inspectors. The distilleries in the Presidency are under the supervision of an Assistant Commissioner, under whom work two Distillery Inspectors. There is an Excise Inspector for Railways who is also Superintendent of the Excise Intelligence Bureau.

Vital statistics and medical services

Emigration

Medical

Vaccination

Sanitation

251. The Collector of Madras continues to be the Protector of Emigrants for the Port of Madras. The Commissioner of Labour, Madras, deals with questions affecting the recruiting of labour whether to places within the Presidency or to places outside it and looks after the arrangements made in respect of depôts, sub-depôts and other places through which labour passes. There is a District Medical and Sanitary Officer for each district except Anjengo, who is officially under the control of the Surgeon-General and of the Director of Public Health. The latter officer is assisted by five Assistant Directors of Public Health. In some districts, separate district health officers have been appointed. Deputy Inspectors of Vaccination who are provincial servants are employed in all districts. Sanitary Inspectors are employed by some local boards and almost all municipal councils.

Instruction

252. For the inspection of boys' schools, there are sixteen Inspectors of Schools whose jurisdiction extends either over one or over two revenue districts. The single district inspectorates are Gōdāvari, Kistna, South Arcot, Tanjore, Tinnevelly and Malabar, while Ganjām and Vizagapatam, Guntūr and Nellore, Bellary and Kurnool, Anantapur and Cuddapah, Madras and Chingleput, North Arcot and Chittoor, Trichinopoly and Salem, Madura and Rāmnād, Coimbatore and the Nilgiris, and South Kanara, Coorg and Bangalore are grouped together, each in charge of an Inspector. Assistant Inspectors are employed in districts in which no Inspector of Schools has his headquarters. Each district is divided into ranges, the number of which varies with the extent of the district and the number of elementary schools contained in it, each range being in charge of a Sub-Assistant Inspector of Schools with one or more supervisors to assist him. For the inspection of girls' schools the Presidency is divided into five circles—Northern, Ceded districts, Central, Southern and Western. The Northern circle comprises the districts of Ganjām, Vizagapatam, Gōdāvari and Kistna; the Ceded districts circle includes Bellary, Kurnool, Anantapur, Cuddapah and Guntūr; the Central circle consists of Nellore, Madras, Chingleput, Chittoor, North Arcot and South Arcot; the Southern circle extends over the districts of Tanjore, Trichinopoly, Madura, Rāmnād and Tinnevelly and the Western circle includes the districts of Coimbatore, the Nilgiris, Salem, Malabar and South Kanara. These five circles are divided into twenty-one ranges for which there are three Assistant and eighteen Sub-Assistant Inspectresses, each range comprising one or two revenue districts.

APPENDIX I

Districts.		Total area.	Population in 1921.	Area of zamindari and whole inam villages.	Area of land in ryotwari villages including minor inams cultivated in falsi 1330.	Area of land shown in column 5 which was irrigated.	Average land revenue for three years ending 1921-22. Land and cesses. Ryotwari.	Revenue (agricultural year). Zamindari and whole inam villages.
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
		SQ. MLS.		ACS.	ACS.	ACS.	LAKHS. RS.	LAKHS. RS.
Circars	Ganjām	4,835	1,835,562	1,952,998	529,870	268,159	13·97	8·85
	Vizagapatam ...	4,568	2,231,874	2,025,189	251,371	75,511	8 46	15·47
	Gōdāvari	2,545	1,470,863	652,121	711,025	307,056	40·43	8·17
	Agency division ...	18,108	1,495,658	9,780,109	300,662	2,270	2·91	1·21
	Kistna	5,535	2,133,314	1,843,340	1,137,081	675,417	71·63	7·82
	Guntūr ...	5,735	1,809,574	280,883	2,086,366	347,153	60·71	1·10
Deccan	Kurnool	7,580	868,858	123,309	1,894,286	126,300	21·67	·21
	Bellary	5,713	862,370	132,435	2,172,739	69,337	19·93	·22
	Anantapur ...	6,722	955,917	162,078	1,726,573	195,660	14·84	·20
	Cuddapah	5,918	887,929	232,922	1,066,823	262,141	17·60	·47
Carnatic	Nellore	7,973	1,385,553	2,573,671	687,992	381,646	28·33	6·35
	Chingleput ...	3,071	1,493,058	606,853	814,676	540,600	23·48	3·17
	Madras	27	522,951	269	Nil.	Nil.	1·32	...
	South Arcot ...	4,207	2,320,085	211,495	1,603,700	640,123	51·84	·43
Central	Chittoor	5,611	1,269,157	1,755,693	458,424	113,395	8·51	5·09
	North Arcot ...	4,954	2,055,594	498,058	1,164,844	570,318	33·76	1·52
	Salem	6,912	2,112,034	1,078,882	1,377,755	275,334	23·67	5·50
	Coimbatore ...	7,225	2,219,848	120,358	2,198,547	622,799	35·13	·41
	Trichinopoly ...	4,320	1,902,838	554,635	1,211,687	417,777	29·31	1·30
South	Tanjore	3,727	3,326,265	372,857	1,140,925	915,192	64·82	2·41
	Madura	4,907	2,007,082	1,016,228	1,127,684	478,737	34·36	2·79
	Rāmnād	4,838	1,721,837	*2,641,229	478,813	99,308	87·36	10·07
	Tinnevelly... ...	4,325	1,901,396	983,466	917,083	393,626	28·57	3·96
West Coast	Malabar	5,792	3,089,399	Nil.	1,679,552	Nil.	39·12	...
	South Kanara ...	4,021	1,247,368	Nil.	761,158	Nil.	27·95	...
	Anjengo	1	5,918	Nil.	339	Nil.	0·05	...
Hills	The Nilgiris ...	982	126,519	Nil.	79,508	Nil.	1·58	...
Bangalore		...	...	...	...	..		...
Travancore		...	...	...	...	...	...	...
Salt, etc., account		...	...	...	...	...	...	...
	Total ...	140,152	43,258,821	29,599,069	27,579,483	7,777,850	711·31	86·72

Districts.		Average revenue for the three years ending 1921-22. Assessed taxes (official year).	Stamps (official year).	Excise (official year).	Salt (official year).	Forest (official year).	Customs (official year).
		(9)	(10)	(11)	(12)	(13)	(14)
		LAKHS. RS.	LAKHS. RS.	LAKHS. RS.			
Circars	Ganjām	1·33	4·53	11·75	Vide Appendix I-A.	Vide Appendix I-B.	Vide Appendix I-C.
	Vizagapatam ...	2·76	5·26	14·61			
	Gōdāvari ...	3·95	7·96	17·43			
	Agency division ...	†4·86	‡0·06	§4·85			
	Kistna	3·32	12·31	29·12			
	Guntūr	1·14	8·09	8·48			
Deccan	Kurnool	1·92	2·95	16·02			
	Bellary ...	1·62	2·57	19·36			
	Anantapur ...	1·10	2·25	19·54			
	Cuddapah	1·55	2·51	13·53			
Carnatic	Nellore	1·37	3·98	10·87			
	Chingleput ...	71·32	4·49	28·73			
	Madras	2·40	18·15	54·57			
	South Arcot ...	0·78	8·70	22·18			
Central	Chittoor	2·18	2·84	9·88			
	North Arcot ..	1·44	5·95	28·74			
	Salem	7·23	6·27	29·84			
	Coimbatore ...	4·18	10·79	37·61			
	Trichinopoly ...	6·64	7·83	22·90			
South	Tanjore	7·31	15·90	37·10			
	Madura	14·43	8·28	20·10			
	Rāmnād	12·48	10·93	11·72			
	Tinnevelly ...	6·58	10·42	16·34			
West Coast	Malabar	1·69	14·35	18·59			
	South Kanara ...		4·95	13·61			
	Anjengo	Nil.	Nil.	0·08			
Hills ...	...The Nilgiris ...	1·92	1·02	7·93			
Bangalore		...	0·04	...			
Travancore		...	0·10	..			
Salt, etc., Accounts		...	3·50	...			
	Total ...	165·50	186·98	522·92			

NOTE.—(1) Column 5 includes second and third crops also.
(2) There are no Government sources of irrigation on the West Coast.

* Includes about 927,724 acres, the unaccounted for difference between (1) atlas sheet scale and traverse area and (2) the estimated area in the village accounts of unsurveyed estates.

† Figures for Agency division for 1921-22 are for Rs. 0·42 lakh. ‡ Represents figures for 1921-22 only.

§ Represents the excise revenue for 1921-22 only.

APPENDIX I-A

SALT REVENUE

Division.	Districts.	Average revenue for the three years ending 1921-22. LAKHS. RS.	Division.	Districts.	Average revenue for the three years ending 1921-22. LAKHS. RS.
Northern division.	Ganjām	66·54	Central division —*cont.*	North Arcot	35·26
	Vizagapatam ...			Salem	
	Gōdāvari		Southern division.	Coimbatore	43·79
	Agency			Trichinopoly	
	Kistna			Tanjore	
	Guntūr			Madura	
	Nellore			Rāmnād	
Central division.	Bellary	35·26		Tinnevelly	
	Anantapur			The Nilgiris	
	Kurnool			Malabar	
	Cuddapah...			South Kanara	
	Chingleput			Anjengo	
	Madras			Total ...	145·59
	South Arcot				
	Chittoor				

APPENDIX I-B

FOREST REVENUE

Forest division.	District.	Average revenue for the three years ending 1921-22. LAKHS. RS.	Forest division.	District.	Average revenue for the three years ending 1921-22. LAKHS. RS.
1. Ganjām ...	Ganjām and Agency ...	·92	18. Vellore North.	North Arcot and a portion of Salem Revenue district.	5·05
2. Vizagapatam.	Vizagapatam and Agency.	·47	19. Vellore South.		
3. Gōdāvari Upper.	Gōdāvari and Agency ...	2·52	20. Vellore West.		
4. Gōdāvari Lower.			21. Salem North.		
5. Kistna ...	Kistna	·63	22. Do. South.	Salem, Trichinopoly ... South Arcot and Tanjore.	6·52
6. Kurnool East.	Kurnool	3·22	23. Do. East.		
7. Kurnool South.			24. Do. West.		
8. Kurnool West.			25. Madura ...	Madura	1·68
9. Bellary ...	Bellary	1·47	26. Tinnevelly...	Rāmnād and Tinnevelly ...	1·87
10. Anantapur ...	Anantapur	2·48	27. North Mangalore.	South Kanara	1·76
11. Guntūr ...	Guntūr	1·39	28. South Mangalore.		
12. Cuddapah North.	Cuddapah	1·61	29. Wynaad ...	Malabar	5·58
13. Cuddapah South.			30. Nilambur ...		
14. Cuddapah West.			31. The Nilgiris.	The Nilgiris	1·06
15. Nellore ...	Nellore	2·28	32. Kollegal ...	Coimbatore and a portion of Malabar.	8·84
16. Chingleput.	Chingleput	·62	33. Coimbatore North.		
17. Chittoor ...	Chittoor	1·39	34. Coimbatore South.		
			35. Palghat ...	Total ...	51·36

APPENDIX I-C

CUSTOMS REVENUE

Maritime districts.	Average revenue for the three years ending 1921-22 LAKHS. RS.
Ganjām	·014
Vizagapatam...	·122
Gōdāvari	1·672
Kistna	·003
Guntūr	·002
South Arcot	5·430
Tanjore	7·605
Rāmnād	5·998
Tinnevelly	7·818
Malabar	8·880
South Kanara	·459
Madras	141·857
Total ...	179·860

APPENDIX II

Statement showing the charges of Divisional Officers in the Madras Presidency for the quinquennium ending with the official year 1921-22.

District and head-quarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges	Ryotwari and inam villages.	Unions.	Name.	Population (1921)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Ganjām (Chatrapur) District Judge's Headquarters, Berhampur.	1. Berhampur (Berhampur).	Berhampur	571	275,454	5·59	10	260	2	Berhampur.	32,731
		Ichchapur (*a*).	231	74,566				1		
		Sōmpēta (*a*).	271	109,369				2		
		Total ...	1,073	459,389	5·59	10	260	5	..	...
	2. Chicacole (Chicacole).	Chicacole ..	350	273,609	6·99	8	228	1	Chicacole ...	16,298
		Narasannapēta.	111					1	...	...
		Tekkali (*a*) ...	238	137,261		1		2	...	...
		Parlākimedi (*a*).	618	274,034		2		1	Parlākimedi.	18,719
		Total ...	1,317	684,904	6·99	11	228	5	...	...
	3. Goomsur (Russellkonda).	Goomsur ...	824	161,962	5·27	8	407	1	..	...
		Aska ...	678	178,418		7		1	...	...
		Surāda (*a*) ...	136	19,334		1		1	...	...
		Total ...	1,638	359,714	5·27	16	407	3	...	...
	4. Chatrapur (Chatrapur).	Chatrapur ...	300	159,580	4·79	6	166	3	...	...
		Kudala (*a*) ..	567	171,975		1		3	..	...
		Total ...	807	331,555	4·79	7	166	6	...	...
		Grand total.	4,835	1,835,562	22·64	44	1,061	19	.	...
Vizagapatam (Vizagapatam).	1. Narasapatam (Narasapatam).	Golgonda ...	493	157,048	2·19	4	193	1	...	...
		Sarvasiddhi ...	341	170,044	2·11	4	149	1	...	..
		Vīravalli (*a*).	386	221,810	1·06	1	257	4	...	...
		Total ...	1,220	548,902	5·36	9	599	6		...
	2. Vizianagram (Vizianagram).	Bimlipatam (*a*).	255	127,298	0·19	1	124	..	Bimlipatam.	7,495
		Vizianagram (*a*).	319	195,860	6·31	1	196	...	Vizianagram.	39,299
		Chipurupalli (*a*).	535	185,732	0·75	1	284	2	..	...
		Gajapatinagaram (*a*).	302	149,361	0·40	1	247	1	...	...
		Palkonda (*a*).	334	229,956	3·95	7	340	3	...	...
		Total ...	1,745	888,207	11·60	11	1,191	6	...	...
	3. Pārvatīpur (Pārvatīpur).	Pārvatīpur (*a*).	401	122,085	1·15	1	231	1	...	...
		Bobbili (*a*) ...	268	156,943	1·67	1	182	1	...	...
		Sālūr (*a*) ...	180	92,268	0·66	1	132	1	...	..
		Total ...	849	371,296	3·48	3	545	3	...	...
	4. Vizagapatam (Vizagapatam).	Srungavarapukōta (*a*).	278	141,094	0·33	1	192	7	...	...
		Anakāpalle (*a*).	301	167,710	1·43	1	152	4	Anakāpalle ..	20,360
		Vizagapatam (*a*).	175	114,665	0·17	1	75	...	Vizagapatam.	44,711
		Total ...	754	423,469	1·93	3	419	11	...	
		Grand total.	4,568	2,231,874	22·37	26	2,754	26		...

(*a*) This denotes zamindari division.

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses Fasli. 1330 (in lakhs.)	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Name.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Godāvari (Cocanada) District Judge's Headquarters, Rajahmundry.	1. Rajahmundry (Rajahmundry).	Rajahmundry.	376	185,699	2·47	5	72	1	Rajahmundry.	53,791
		Amalāpuram.	367	226,661	8·05	6	91	1	...	...
		Razole ...	291	226,744	8·63	7	82	2		
		Total ...	1,034	639,104	19·15	18	245	4		
	2. Peddāpuram (Peddāpuram).	Peddāpuram	604	182,300	3·70	6	160	3	Peddāpuram.	14,620
		Rāmachandrapuram.	291	256,416	12·95	7	96	8	...	
		Total ...	895	438,716	16·65	13	256	11	...	...
	3. Cocanada (Cocanada).	Cocanada ...	297	229,151	5·79	5	35	2	Cocanada ..	53,348
		Pithāpuram (a).	193	92,566	3·11	...	...	2	...	...
		Tuni (a) ...	126	71,326	0·58	...	2	1	...	...
		Total ...	616	393,043	9·48	5	37	5	...	...
		Grand total.	2,545	1,470,863	45·28	36	538	20	...	...
Kistna (Masulipatam).	1. Masulipatam (Masulipatam).	Bandar ...	242	126,703	3·21	4	60	2	Masulipatam.	43,940
		Divi ...	459	144,196	7·51	5	32	2	...	...
		Total ..	701	270,899	10·72	9	92	4	...	..
	2. Gudivāda (Gudivāda)	Gudivāda ...	313	179,556	9·00	7	142	6	...	...
		Kaikalur ...	393	70,826	4·16	5	98	...		...
		Total ...	706	250,382	13·16	12	240	6	...	...
	3. Bezwada (Bezwada).	Bezwada ...	236	159,806	3·98	5	74	4	Bezwada ...	44,159
		Nandigāma ...	532	155,981	2·94	5	131	2	...	...
		Gannavaram.	290	104,999	4·76	3	43	1	..	...
		Nuzvīd (a) ...	297	65,077	0·12	1	51	1	...	...
		Tiruvūr (a) ...	425	79,788	0·14	1	9	1	.. ..	
		Total ...	1,780	565,651	11·94	15	308	9	...	...
	4. Ellore (Ellore).	Ellore ...	766	220,063	6·66	6	152	8	Ellore ...	45,862
		Yernagudem.	601	161,368	2·78	4	63	3	..	...
		Total ...	1,367	381,431	9·44	10	215	11	...	...
	5. Bhīmavaram (Bhīmavaram).	Bhīmavaram	347	187,702	12·00	8	102	5	...	...
		Total ...	347	187,702	12·00	8	102	5		...
	6. Narasapur (Narasapur).	Narasapur ...	262	190,807	8·07	6	70	4	Palacole ...	14,535
		Tanuku ...	372	286,442	12·99	9	137	11		
		Total ...	634	477,249	21·06	15	207	15	..	..
		Grand total.	5,535	2,133,314	78·32	69	1,164	50	...	
Guntūr (Guntūr).	1. Narasaraopet (Narasaraopet).	Narasaraopet.	716	211,631	5·25	6	114	1	Narasaraopet.	11,308
		Vinukonda ...	644	100,611	2·22	5	77	1	...	
		Palnad ...	1,041	156,958	4·97	6	94	5	...	...
		Total ...	2,401	469,200	12·44	17	285	7	..	...
	2. Guntūr (Guntūr).	Guntūr ...	500	254,923	6·24	5	116	11	Guntūr ...	48,184
		Sattenapalle.	714	188,310	5·11	5	136	6	...	...
		Total ...	1,214	443,233	11·35	10	252	17	....	...
	3. Tenali (Tenali).	Tenali ...	302	225,348	12·68	7	84	18	Tenali ...	23,230
		Rēpalle ...	338	150,389	7·47	6	72	2	Rēpalle ...	11,757
		Total ...	640	375,737	20·15	13	156	20	...	...

(a) This denotes zamindari division.

District and head quarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Name.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Guntūr (Guntūr)—*cont.*	4. Ongole	Ongole (including a portion of Venkatagiri Zamindari).	792	259,892	5·48	6	175	1	...	...
		Bāpatla	688	261,512	12·25	7	121	9	Chirala	15,323
		Total	1,480	521,404	17·73	13	296	10	...	...
		Grand total	5,735	1,809,574	61·67	53	989	54	...	...
Nellore.	1. Gūdūr (Gūdūr).	Gūdūr	658	106,882	2·92	4	74	3	...	...
		Rapūr	594	67,591	1·49	5	120	...	...	...
		Pōlūr (*a*)	364	70,867	...	1	21	1	...	...
		Venkatagiri (*a*).	427	69,699	...	...	...	1	...	...
		Total	2,043	315,039	4·41	10	215	5	...	...
	2. Kandukūr (Kandukūr).	Kandukūr	787	164,665	3·98	5	125	1	...	...
		Kanigiri	1,014	129,474	0·63	4	56	1	...	...
		Podili (*a*)	564	72,761	...	...	...	...	...	...
		Darsi (*a*)	616	94,047	...	...	...	...	...	...
		Total	2,981	460,947	4·61	9	181	2	...	...
	3. Kāvali (Kāvali).	Kāvali	548	101,667	2·64	4	55	1	...	...
		Kovvūr	387	132,393	6·16	5	84	3	...	...
		Total	935	234,060	8·80	9	139	4	...	...
	4. Ātmakūr (Ātmakūr).	Ātmakūr	640	105,640	3·12	6	108	2	...	...
		Udayagiri	871	97,088	0·60	4	53	1	...	...
		Total	1,511	202,728	3·72	10	161	3	...	...
	5. Nellore (Nellore).	Nellore	503	172,779	6·18	6	105	...	...	...
		Zamindari Peshkash, etc., Huzur demand.	...	...	6·26	...	...	...	...	...
		Grand total	7,973	1,385,553	33·98	44	801	14	...	...
Cuddapah (Cuddapah).	1. Rajampet (Rajampet).	Rajampet	1,035	151,380	2·40	5	144	3	...	...
		Badvel	755	90,790	1·29	4	140	2	...	..
		Siddhavattam.	606	61,057	0·85	3	79	1	...	...
		Total	2,396	303,227	4·54	12	363	6	...	...
	2. Jammalamadugu (Jammalamadugu).	Jammālamadugu	612	98,572	2·42	5	138	1	...	...
		Proddatur	430	95,793	2·86	5	86	.	Proddatur ..	15,906
		Kamalāpuram	303	65,081	1·49	3	63	1		...
		Total	1,345	259,446	6·77	13	287	2	...	...
	3. Rāyachōti. (Rāyachōti).	Rāyachōti	1,103	134,798	1·38	6	118	1	...	...
		Pulivēndla	565	88,326	1·95	4	97	2	...	...
		Total	1,668	223,124	3·33	10	215	3	...	...
	4. Cuddapah (Cuddapah).	Cuddapah	509	102,132	2·23	5	110	2	Cuddapah ...	19,517
		Grand total	5,918	887,929	16·87	40	975	13	..	...
Anantapur (Anantapur).	1. Penukonda (Penukonda).	Penukonda	678	92,918	0·88	4	105	2	...	...
		Hindupur	428	100,490	1·14	4	87	..	Hindupur ...	12,456
		Madakasira	443	85,595	0·80	3	61	2	...	...
		Total	1,549	278,003	2·82	11	253	4	...	...

(*a*) This denotes zamindari division.

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921)	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Name.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Anantapur (Anantapur)—*cont.*	2. Dharmavaram (Dharmavaram).	Dharmavaram.	732	88,668	1·19	5	63	1	...	...
		Kadiri ..	1,162	150,352	1·41	6	146	1	...	...
		Total ...	1,894	239,020	2·60	11	209	2	...	...
	3. Gooty (Gooty).	Gooty ...	896	134,355	2·64	6	135	5	...	...
		Tadpatri ...	641	111,550	2·17	5	97	2	Tadpatri	11,293
		Total ...	1,537	245,905	4·81	11	232	7	...	...
	4. Anantapur (Anantapur).	Anantapur ...	925	111,825	1·61	5	118	1	Anantapur ...	11,452
		Kalyāndrug ..	817	80,164	1·10	5	74	2	...	...
		Total ...	1,742	191,989	2·71	10	192	3	...	...
		Grand total ...	6,722	955,917	12·94	43	886	16	...	...
Bellary (Bellary).	1. Bellary (Bellary).	Bellary ...	705	119,228	2·80	4	114	3	Bellary ...	39,842
		Siruguppa ...	458	66,529	2·51	4	98	3	...	...
		Total ...	1,163	185,757	5·31	8	212	6	...	..
	2. Rayadrug (Rayadrug).	Rayadrug ..	628	79,559	1·71	4	72	2	...	...
		Kudligi ...	863	92,991	1·36	5	119	2	...	...
		Total ...	1,491	172,550	3·07	9	191	4	...	...
	3. Hospet (Hospet).	Hospet ...	537	85,256	2·03	5	128	3	Hospet ...	18,337
		Hadagalli ...	587	77,495	1·75	4	88	2	...	...
		Harpanahalli.	611	84,974	1·49	4	84	1	...	...
		Total ...	1,735	247,725	5·27	13	300	6	...	...
	4. Adōni (Adōni)	Adōni ...	742	166,331	2·69	5	175	5	Adōni ...	30,232
		Ālūr ...	582	90,007	3·35	4	84	3	...	...
		Total ..	1,324	256,338	6·04	9	259	8	...	...
		Grand total ...	5,713	862,370	19·69	39	962	24	...	...
Kurnool (Kurnool).	1. Nandyal (Nandyal).	Nandyal ...	679	74,204	2·79	5	73	1	Nandyal ...	18,124
		Nandikōtkur.	1,308	104,882	3·79	6	92	3	...	..
		Total ...	1,987	179,086	6·58	11	165	4	...	...
	2. Dhone (Dhone).	Dhone ...	817	88,828	1·41	5	77	3	...	...
		Pattikonda ...	747	101,403	2·26	5	73	3	...	...
		Total ...	1,564	190,231	3·67	10	150	6	...	...
	3. Kōilkuntla (Kōilkuntla).	Kōilkuntla ...	572	83,440	3·03	5	86	2	...	...
		Sirvel ...	617	77,969	2·73	5	87	...	..	...
		Total ...	1,189	161,409	5·76	10	173	2	...	...
	4. Mārkāpur (Mārkāpur).	Cumbum ...	1,060	119,931	1·48	5	104	3	...	...
		Mārkapur ...	1,140	106,974	1·11	5	95	2	...	...
		Total ...	2,200	226,905	2·59	10	199	5	..	...
	5. Kurnool (Kurnool).	Kurnool ...	640	111,227	2·83	6	97	3	Kurnool ...	27,908
		Grand total ...	7,580	868,858	21·43	47	784	20	...	...
Madras (Madras).	Madras ..	Madras ...	27	522,951	1·65	5	15	...	Madras Corporation ...	522,951

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Names.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Chingleput (Saidapet) District. Judge's Headquarters, Chingleput.	1. Chingleput (Chingleput).	Madurāntakam ...	530	235,957	4·17	6	410	3	...	...
		Chingleput ..	436	181,848	3·16	6	307	2	Chingleput ...	11,763
		Conjeeveram.	412	240,399	4·85	6	326	2	Conjeeveram.	61,376
		Total ...	1,378	658,204	12·18	18	1,043	7	...	...
	2. Saidapet (Saidapet).	Śrīperumbudur ...	306	162,595	3·93	5	246	3	...	...
		Saidapet ...	249	221,323	2·15	5	179	2	Saidapet ...	27,404
		Total ...	555	383,918	6·08	10	425	5	...	...
	3. Tiruvallūr (Tiruvallūr).	Tiruvallūr ...	416	207,199	4·04	5	332	1	...	...
		Ponneri ...	722	243,737	4·08	6	467	4	...	...
		Total ...	1,138	456,936	8·12	11	799	5	...	...
		Peshkash Huzūr demand.	...	...	0·01	...	...	...	...	...
		Grand total ...	3,071	1,493,058	26·39	39	2,267	17	...	...
Chittoor (Chittoor).	1. Chandragiri (Chandragiri).	Chandragiri	548	122,208	1·27	4	101	2	Tirupati ...	17,434
		Kālahasti (a).	637	109,177	0·93	1	...	1	...	...
		Puttūr (a) ...	542	181,826	1·63	1	...	2	...	...
		Tiruttani (a).	401	184,755	1·00	1	...	1	...	...
		Total ...	2,128	597,960	4·83	7	101	6	...	...
	2. Madanapalle (Madanapalle).	Vāyalpād ...	802	132,325	1·60	6	127	1	...	...
		Madanapalle.	836	141,310	1·77	6	111	3	...	...
		Punganūru (a)	648	109,391	1·05	2	9	1	...	...
		Total ...	2,286	383,026	4·42	14	247	5	...	...
	3. Chittoor (Chittoor).	Chittoor ...	786	237,737	3·35	8	165	...	Chittoor .	17,941
		Palamanēr ...	411	50,434	0·78	4	93	1	...	...
		Total ...	1,197	288,171	4·13	12	258	1	...	...
		Peshkash Huzūr demand.	...	...	0·01	...	...	...	...	...
		Grand total ...	5,611	1,269,157	13·39	33	606	12	...	...
North Arcot (Vellore).	1. Tiruppattūr (Tiruppattūr).	Tiruppattūr.	539	209,602	1·54	3	210	1	Tirupattūr ...	16,275
		Gudiyāttam .	481	213,795	3·54	6	186	1	Gudiyāttam ...	22,803
		Kangundi ...	346	64,346	0·01	...	319	1	Vāniyambādi.	20,090
		Total ...	1,366	487,743	4·89	9	715	3	...	...
	2. Vellore (Vellore).	Vellore ...	432	226,541	2·59	5	158	4	Vellore ...	50,210
		Arni ...	180	123,462	0·07	1	193	2	...	...
		Total ...	612	350,003	2·66	6	351	6	...	...
	3. Rānipet (Ranipet).	Wallajah ..	395	225,963	4·28	6	189	5	Wallajah ..	10,013
		Arkonam ...	319	172,969	4·05	5	143	4	...	...
		Total ...	714	398,932	8·33	11	332	9	...	...
	4. Cheyyar (Tiruvettipuram.)	Cheyyar ...	328	161,950	4·94	7	222	2	...	...
		Wandiwash ..	340	171,710	4·33	6	207	2	...	...
		Total ..	668	333,660	9·27	13	429	4	...	...
	5. Tiruvannāmalai. (Tiruvannāmalai).	Tiruvannāmalai	1,010	305,217	5·62	8	391	3	Tiruvannāmalai ...	21,912
		Polūr ...	584	180,039	3·61	6	179	4	...	...
		Total ...	1,594	485,256	9·23	14	570	7	...	...
		Grand total ..	4,954	2,055,594	34·38	53	2,397	29	...	...

(a) This denotes zamindari division.

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of Revenue Inspector's charges.	Number of Ryotwari and inam villages.	Number of Unions.	Municipalities. Names.	Municipalities. Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
South Arcot (Cuddalore).	1. Tindivanam (Tindivanam).	Tindivanam...	446	219,551	5·33	6	250	3	...	...
		Villupuram ...	467	330,777	7·53	7	288	1	Villupuram ...	17,423
		Gingee ...	410	206,339	4·39	6	245	...	...	...
		Total ...	1,323	756,667	17·25	19	783	4	...	...
	2. Chidambaram (Chidambaram).	Chidambaram.	402	310,405	9·53	7	341	5	Chidambaram ...	22,501
		Vriddachalam.	576	263,577	6·36	6	295	4	...	...
		Total ...	978	573,982	15·89	13	636	9	...	...
	3. Tirukkōyilur (Tirukkōyilūr).	Tirukkoyilur.	585	322,315	7·17	7	348	5	...	...
		Kallakurchi.	873	309,100	6·38	7	276	5	...	...
		Total ...	1,458	631,415	13·55	14	624	10	...	...
	4. Cuddalore (Cuddalore).	Cuddalore ...	448	358,021	6·24	7	241	3	Cuddalore ...	50,527
		Grand total ...	4,207	2,320,085	52·93	53	2,284	26	...	...
Tanjore (Tanjore).	1. Kumbakōnam (Kumbakonam).	Kumbakōnam.	211	269,565	8·25	5	213	3	Kumbakōnam ..	60,700
		Papanasam ...	230	181,166	7·73	4	187	5	...	...
		Total ...	441	450,731	15·98	9	400	8		...
	2. Negapatam (Negapatam).	Negapatam ...	240	223,335	5·57	4	213	...	Negapatam ...	54,016
		Nannilam ...	291	206,726	10·91	5	252	2	Tiruvālur ...	24,124
		Total ...	531	430,061	16·48	9	465	2		...
	3. Māyavaram (Māyavaram).	Māyavaram ...	283	251,440	8·67	5	188	2	Māyavaram ...	28,617
		Shiyali ...	171	131,226	4·01	3	97	2	...	...
		Total ...	454	382,666	12·68	8	285	4	...	...
	4. Mannārgudi (Mannārgudi).	Mannārgudi...	301	191,991	6·02	4	202	2	Mannārgudi.	21,636
		Tirutturaipūndi ...	497	192,398	5·07	5	152	4	...	...
		Total ...	798	384,389	11·09	9	354	6	...	...
	5. Pattukkōttai (Pattukkōttai).	Pattukkōttai.	700	277,798	1·06	4	483	3	...	...
		Arantangi ..	382	113,391	0·86	3	570	1	...	...
		Total ...	1,082	391,189	1·92	7	1,053	4	...	...
	6. Tanjore (Tanjore).	Tanjore ...	421	287,229	6·76	5	240	4	Tanjore ...	59,913
		Grand total ...	3,727	3,326,265	64·91	47	797	28	...	...
Trichinopoly (Trichinopoly).	1. Ariyalur (Ariyalūr).	Perambalur ..	674	236,680	4·23	6	136	4	...	...
		Udaiyarpālaiyam ...	756	343,502	3·98	6	135	4	...	...
		Total ...	1,430	580,182	8·21	12	271	8	...	...
	2. Musiri (Musiri).	Musiri ...	675	291,025	4·697	6	143	5	...	...
		Lālgudi ...	372	202,687	5·530	6	127	3	...	...
		Total ...	1,047	493,712	10·227	12	270	8	...	...

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Names.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Trichinopoly (Trichinopoly)—*cont.*	3. Trichinopoly.	Trichinopoly.	332	273,455	3·93	6	125	1	Trichinopoly ..	120,422
									Srīrangam ...	23,153
	4. Karūr (Karūr).	Karūr ...	609	250,341	3·79	6	102	2	Karūr ..	18,249
		Kulittalai ...	901	305,148	3·37	5	233	5	...	...
		Total ...	1,510	555,489	7·16	11	335	7	...	...
		Grand total ...	4,319	1,902,838	29·53	41	1,001	24	...	...
Madura (Madura).	1. Dindigul (Dindigul).	Dindigul ...	893	403,700	4·82	7	123	4	Dindigul ...	30,922
		Palni ...	599	224,453	2·97	5	69	3	Palni ...	17,501
		Nilakkōttai ...	411	204·666	4·25	6	107	3	...	...
		Kōdaikānal ...	413	23·136	0·43	2	16		Kōdaikānal.	4,283
		Total ...	2,316	855,955	12·48	20	315	10	...	...
	2. Usilampatti (Usilampatti).	Tirumangalam	733	319,727	5·11	7	193	5	...	...
		Periyakulam	1,107	383,074	4·54	6	47	12	Periyakulam ..	16,478
									Bōdināyakkanūr ...	20,341
		Total ...	1,840	702,801	9·65	13	240	17	...	...
	3. Mēlūr (Madura).	Madura ...	267	275,948	6·01	8	223	2	Madura ...	138,894
		Mēlūr ...	484	172,378	6·19	7	105	4	...	...
		Total ...	751	449,326	12·20	15	328	6	..	...
		Grand total ...	4,907	2,007,882	34·32	48	883	33	...	...
Rāmnād district (Madura).	1. Sivakāsi (Sivakāsi).	Sattūr ...	575	247,771	3·69	6	165	1	Virudupatti.	43,642
		Srīvilliputtūr.	440	221,077	3·89	6	83	3	Sivakāsi ...	29,234
									Srīvilliputtūr ...	62,390
		Total ...	1,015	468,848	7·56	12	248	4	...	...
	2. Rāmnād (Rāmnād).	Aruppukōttai ...	2,090	217,310	0·86	2	201	2	...	...
		Rāmnād ...		122,555	4·09	1	73	6	...	...
		Mudukulattūr ...		161,398	0·12	1	171	3	...	...
		Paramagudi...		150,520	0·25	1	181	3	...	...
		Total ...	2,090	651,783	5·32	5	626	14	...	...
	3. Devakōttai (Devakōttai)	Sivaganga ...	1,733	202,996	4·0	1	267	4	...	...
		Tiruppattūr...		235,030	0·24	1	174	5	...	...
		Tiruvādānai (*b*)	...	163,180	0·26	1	230	2	...	...
		Total ...	1,733	601,206	4·50	3	671	11	...	...
		Huzur ...			0·57	...	...	...	...	...
		Grand total ...	4,838	1,721,837	17·95	20	1,545	29	...	...
Tinnevelly (Tinnevelly).	1. Sērmadēvi (Sērmadēvi).	Ambāsamudram ...	498	195,289	5·53	5	104	14	...	...
		Nāngunēri ...	694	235,210	4·71	9	120	9	..	...
		Total ...	1,192	430,499	10·24	14	224	23	...	...
	2. Tuticorin (Tuticorin).	Srīvaikuntam.	361	215,123	4·73	5	86	3	Tuticorin ...	44,522
		Tiruchendūr.	323	212,996	3·35	5	87	5	...	...
		Total ...	684	428,119	8·08	10	173	8	...	...

(*a*) This denotes zamindari division.

(*b*) Included in the area shown against Rāmnād division.

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Names.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Tinnevelly (Tinnevelly)—*cont.*	3. Kōvilpatti.	Kōvilpatti ...	1,083	347,628	3·43	6	104	4	...	...
		Sankaranāyinārkōyil.	637	251,627	3·43	5	89	5		...
		Total ...	1,720	599,255	6·86	11	193	9	...	
	4. Tinnevelly (Tinnevelly).	Tinnevelly ...	326	221,035	4·21	7	136	1	Tinnevelly.	53,810
		Tenkāsi ...	403	222,488	3·16	5	46	3	Palamcottah.	46,643
									...	...
		Total ...	729	443,523	7·37	12	182	4	...	...
		Grand total ...	4,325	1,901,396	32·55	47	772	44	...	...
Salem.	1. Hōsūr ...	Hōsūr ...	1,217	186,430	2·04	6	223	2	...	...
		Krishnagiri ...	656	167,302	1·92	6	146	2	...	...
		Total ...	1,873	353,732	3·96	12	369	4	...	...
	2. Dharmapuri ...	Dharmapuri ...	943	216,133	2·43	6	152	6	...	...
		Uttangarai ...	910	152,740	1·95	6	464	1	...	...
		Total ...	1,853	368,873	4·38	12	616	7	...	...
	3. Sankari ...	Tiruchengōdu.	604	333,352	3·62	5	148	4	...	...
		Ōmalūr ...	406	170,419	2·65	4	122	3	...	
		Total ...	1,010	503,771	6·27	9	270	7	...	...
	4. Salem ...	Salem ...	522	246,602	2·14	6	271	6	...	...
		Atur ...	649	179,149	2·84	5	136	8	...	...
		Total ...	1,171	425,751	4·98	11	407	14	...	...
	5. Nāmakkal.	Nāmakkal ...	613	287,856	2·18	5	194	8	...	...
		Rāsipuram ...	392	172,051	1·82	4	147	3	...	...
		Total ...	1,005	459,907	4·00	9	341	11	...	...
		Grand total ...	6,912	2,112,034	23·59	53	2,003	43	...	...
Coimbatore (Coimbatore).	1. Pollāchi (Pollāchi).	Pollāchi ...	692	224,122	3·23	4	139	3	Pollāchi ..	11,875
		Palladam ...	593	267,444	4·11	4	102	4	Tiruppūr ...	10,851
		Udamalpet ...	566	151,316	2·73	3	93	...	Udamalpet ..	10,236
		Total ...	1,851	642,882	10·07	11	334	7		...
	2. Erōde (Erode).	Erode ..	598	312,629	5·57	6	215	1	Erode ...	22,911
		Dhārāpuram.	853	284,841	4·79	5	86	2	Dhārāpuram.	16,124
		Total ...	1,451	597,470	10·36	11	301	3	...	...
	3. Gōbichettipālaiyam.	Gōbichettipālaiyam ...	1,124	244,556	5·52	6	154	5	...	...
		Bhavāni ...	715	181,212	1·73	4	66	1	...	...
		Total. ...	1,839	425,768	7·25	10	220	6	...	...
	4 Kollegal ...	Kollegal ...	1,076	95,356	1·32	4	89	4	...	...
	5. Coimbatore.	Coimbatore ...	520	271,379	3·43	4	81	4	Coimbatore ..	65,788
		Avanāshi ...	488	186,993	2·82	4	72	2	...	...
		Total ...	1,008	458,372	6·25	8	153	6	...	...
		Grand total ...	7,225	2,219,848	35·25	44	1,097	26	...	...

District and headquarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Current demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspectors charges.	Ryotwari and inam villages.	Unions.	Names.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
The Nilgiris, Ootacamund.	1. Ootacamund (in-charge of Collector) Coonoor (Coonoor).	Gūdalūr ...	280	22,079	0·55	2	12	..	...	...
		Ootacamund.	461	45,799	0·48	3	19	...	Ootacamund.	19,467
		Coonoor ...	241	58,641	0·54	3	23	...	Coonoor ...	12,215
		Total ...	702	104,440	1·02	6	42	..	...	...
		Grand total ...	982	126,519	1·57	8	54	..	...	...
Malabar (Calicut) District Judge's Headquarters, South Malabar, Calicut, North Malabar, Tellicherry.	1. Tellicherry (Tellicherry).	Chirakkal ...	689	346,395	4·04	5	272	...	Cannanore ...	27,705
		Kōttayam ...	481	232,285	2·48	3	227	...	Tellicherry ...	27,576
		Kurumbranād.	505	356,907	4·93	5	341	1	...	...
		Total ...	1,675	935,587	11·45	13	840	1	...	...
	2. Malappuram (Malappuram).	Ernād ...	966	401,101	4·65	5	221	...	...	...
		Walavanad ...	880	394,517	5·56	6	317	...	...	...
		Total ...	1,846	795,618	10·21	11	538	..	...	...
	3. Palghat (Palghat).	Palghat ...	643	427,015	6·16	6	138		Palghat ...	45,487
		Ponnāni ...	426	533,252	6·75	7	460	2	...	...
		Total ...	1,069	960,267	12·91	13	598	2	...	...
	4. Wynaad (Manantoddy)	Wynaad ...	821	84,771	1·77	5	88	...	...	...
	5. Cochin (Cochin).	Cochin ...	2	22,417	0·17	...	1	...	Cochin ..	20,637
	6. Calicut (Calicut).	Calicut ...	379	290,739	2·58	4	188	...	Calicut ...	82,334
		Grand total ...	5,792	3,089,399	39·09	46	2,223	4	....	...
South Kanara (Mangalore).	1. Coondapoor (Coondapoor).	Coondapoor.	619	139,359	3·51	4	103	...	...	...
		Udipi ...	359	209,909	4·71	5	115	...	...	...
		Karkal ...	629	139,641	3·20	5	105	...	...	...
		Total ...	1,605	488,900	11·42	14	323	...	...	...
	2. Puttūr (Puttūr).	Kāsaragōd ...	762	256,931	5·01	6	114	...	...	...
		Uppinangadi.	1,239	193,779	4·36	7	182	...	...	...
		Total ...	2,001	450,710	9·37	13	296	...	...	...
	3. Mangalore (Mangalore).	Mangalore (*a*).	415	307,758	6·22	7	180	...	Mangalore ...	53,877
		Grand total ...	4,021	1,247,368	27·01	34	799	...	...	...
Anjengo (Trivandrum) District Judge's Headquarters, Calicut.	Anjengo (Trivandrum).	Anjengo ...	1	4,145	0·04	...	1	(*b*)1	...	...
		Tangassēri.		1,773	0·01	..	1	...	..	...
		Total ...	1	5,918	0·05	...	2	1	..	...
Agency Division.	1. Khond Agency (Russellkonda).	Balliguda ...	1,390	105,928	...	1	1,334	...	...	...
		Ramagiri ..	1,191	148,957			563	..	..	...
		G. Udayagiri.	504	78,013	...	..	353	...	...	...
		Total ...	3,085	332,198	...	1	2,250	...	..	...

(*a*) The figures shown against Mangalore taluk include those relating to Amindivi Islands.
(*b*) Abolished in G.O. No. 512, L. & M., dated 16th March 1922.

District and head-quarters.	Divisions and headquarters.	Taluks and zamindari divisions.	Area in square miles.	Population (1921).	Currant demand of Land Revenue and Cesses, Fasli 1330 (in lakhs).	Number of			Municipalities.	
						Revenue Inspector's charges.	Ryotwari and inam villages.	Unions.	Names.	Population (1921).
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agency Division—*cont.*	2. Savara Agency (Waltair).	Gunupur	1,188	122,077	...	1	119	1	...	...
		Bissamcuttak.	830	61,844	...	...		...	...	...
		Raigada	1,108	128,997	...	...	...	...	...	...
		Total ...	3,126	312,918	...	1	119	1	...	...
	3. Oriya Agency (Koraput). Waltair temporarily for 3 months in the year.	Jeypore	1,015	162,156	·96	...	...	1	...	...
		Nowrangapur.	2,172	170,492	...	...	...	1	...	...
		Malkangiri	2,376	53,731	...	...	...	...	...	...
		Koraput	671	56,548	...	...	...	...	...	...
		Total ...	6,234	442,927	·96	...	...	2	...	...
	4. Ghats Agency (Waltair).	Padwa	1,383	101,867	...	...	...	...	...	...
		Pottangi	625	80,864	...	...	...	...	...	...
		Total ...	2,008	182,731	...	...	...	...	...	...
	5. Rampa Agency (Pōlavaram)	Gudem	869	21,779	0·01	...	433	...	...	...
		Polāvaram	543	66,994	0·71	4	96	...	...	...
		Yellavaram	919	37,954	0·36	2	142	...	...	...
		Chōdavaram.	710	28,051	0·09	1	365	...	...	...
		Total ...	3,041	154,778	1·17	7	1,036	...	...	...
	6. Koya Agency (Bhadrāchalam) Rajahmundry temporarily for 3 months in the year.	Bhadrāchalam	911	50,038	0·19	4	139	...	...	...
		Nugur	593	20,068	0·16	2	58	...	...	...
		Total ...	1,504	70,106	0·35	6	197	...	...	...
		Grand total ...	18,998	1,495,658	2·48	15	3,602	3	...	...

DETAILS OF THE LAST CENSUS—TRIBES AND LANGUAGES

Introduction

253. This brief description of the castes, tribes and languages found in the Presidency is in the main a condensation of Chapters IX and XI of the report on the census of 1921.

254. The inclusion of any discrimination between castes was stoutly opposed by those ultra-progressive thinkers who argue that such acceptance of caste grouping by the Government of the country serves to perpetuate inter-caste feeling, and that in any case personal predilection makes the figures entirely unreliable, owing to the deliberate misstatements of many members of lower castes desirous of representing their claims to higher status. But the fact remains that Indian social life still rests on the caste system, and to argue that the census tables, which, although they offer a mine of information to the statistician and the ethnologist, are hardly the type of literature to be found even in the library of the educated, will have any noticeable effect on the prejudices of the people, is on the face of it a far-fetched contention.

Method of classification

255. The classification of castes and tribes by the professions with which they were supposed to be traditionally connected was, after adoption from 1871 to 1901, abandoned in the last-named year, and the 1911 and 1921 enumerations were based on a linguistic division in the case of Hindus and Animists. The Musalman population was separated into the conventional tribes, Sheiks, Saiyads, Māppillas, etc., while Christians were divided into Europeans, Anglo-Indians and Indians. The 1921 tables show a new departure in the enumeration under each caste-head of the number of persons in that caste who favour each language spoken in the caste. This innovation is obviously of immense value. In a polyglot country like India, there are in many cases sections of the people who go by the same caste name, but who are by geographical separation fundamentally divergent in character and language.

Caste influence

256. It may be of interest, before turning to the figures of individual sections of the community, to consider whether there has been any indication in the last decade of any diminution of caste-feeling. It is only this last decade that has seen the real birth and growth to maturity of that division, regrettable perhaps, but none the less very lively, between the Brāhman and non-Brāhman elements in politics. The victory of the non-Brāhman party in 1920 and the extensive powers of patronage thus placed in their hands have inevitably led to a consolidation of the Brāhman community for self-protection, and it will be very hard for the advocate of the abolition of caste-distinction to find a grain of comfort in this development. Nor are there signs of the welding of castes among the non-Brāhman peoples. There has been a very distinct tendency towards the formation of caste "sangams"—associations founded for the avowed purpose of promoting the sole interests of individual castes—of which the Nādār and Kallar sangams may be taken as typical; such associations cannot but foster caste distinctions, and it is a moot question whether, as long as they continue to promote the advance of education and, in the case of the Kallars, communal repression of crime as their chief endeavours, their presence is not more beneficial than their absence to the welfare of the country.

Hindus

257. In the case of a certain number of the Hindu castes, the criticism of inaccuracy already referred to does undoubtedly arise. There are Sourāshtras who enter themselves as Brāhmans, Badagas who claim to be Lingāyats, and so on. But this slight inaccuracy was foreseen by the census staff and guarded against as far as possible; and, after all, in the great majority of castes the charge of misrepresentation does not apply. The main Hindu castes, taking as a minimum a total of half a million souls, are shown in the sub-joined table, their numbers being given in hundreds of thousands. The most notable increase occurs among the

Telagas (21·1 per cent); this increase is heaviest in Gōdāvari district, where Kāpus and Pallis have correspondingly decreased. Brāhmans have risen in number by 11·7 per cent, mainly in the Telugu areas; no satisfactory explanation can be given for the quicker growth of the Telugu section in comparison with the Tamil and other portions of the caste. At the foot of the social scale, the Pallans have remained practically stationary; they show a decrease in the Trichinopoly, Tanjore and Coimbatore districts. As this is an area much frequented by the Straits emigration kangāni, and considering the lure offered by the plantations of the Straits during the last decade, such a decrease in the coolie class is not surprising. The attraction of Ceylon probably accounts for a similar decrease of the Paraiyans of Tinnevelly, the only local section of their caste to show a decrease. The following is the table of the main sections of the Hindu community :—

Caste.	Strength (000's omitted).	Percentage of variation, 1911-1921.	Caste.	Strength (000's omitted).	Percentage of variation, 1911-1921.
Palli	2,810	− 0·4	Pallan	863	− 0·4
Vellāla	2,654	+ 4·7	Idaiyan	744	+ 1·2
Kāpu	2,631	− 1·8	Madiga	737	− 8·7
Paraiyan	2,387	+ 1·0	Tiyan	676	+ 5·7
Māla	1,493	− 1·2	Nādār	665	+ 2·1
Brāhman	1,463	+ 11·7	Telaga	604	+ 21·1
Kamma	1,161	+ 3·1	Chakkiliyan ...	550	+ 4·4
Kammālan ...	1,088	+ 7·0	Odde	537	− 2·3
Balija	1,041	...	Kallan	534	− 0·2
Golla	907	+ 0·3	Velama	516	+ 6·0

Smaller castes

258. But it is not among these great castes that the most violent fluctuations occur. The Kōmatis, chiefly in Guntūr, have lost 21 per cent of their 1911 total; the Vaisyas of these same parts have increased from 6,000 to almost half a million; and there is no need to go further than the social ambition of the Kōmatis to find a very adequate explanation for these allied changes. Similarly the Kshatriyas have increased by over 100 per cent, while the ambitious Nādārs, Pallis and Rāzus have lost ground or failed to increase. The endeavours of Government and of their own leaders to elevate the "Depressed classes" lend interest to the appearance for the first time of the name Ādi-Drāvida. That this new appellation, now officially adopted, has not spread to any appreciable extent beyond the centres of the recent industrial disturbances, is clearly shown in the returns; for, except in Madras and Chingleput, the members of this community continued to describe themselves either as Panchamas or by their traditional caste names.

Aborigines

259. To the ethnologist, by far the most interesting part of a census table is that which relates to the primitive forest, jungle and gipsy tribes. And it is exactly this section of the South Indian population which presents the greatest difficulty to the census officer. For example, under the names Porojā and Gadabā are grouped three or four distinct tribes, each with its own customs and language, and it is impossible to ensure that the enumerators will be able to discriminate between these various divisions. In the recent census, in fact, more than half of the people of these tribes were returned simply as Porojās or Gadabās, without the distinguishing sub-name. Of the 19 jungle tribes enumerated, seven have lost ground since 1901. A decrease of 29·6 per cent in the number of the Kudubis is apparently due to an earlier confusion between them and the Kurubas. The Konda Doras of the Agency have lost over 25 per cent of their number; it is uncertain whether emigration or mortality has caused this fall. The Tōdas—probably best known by name of all the jungle tribes to the average reader—appear to be gradually dying out. The large increase in the number of Gonds may be due to confusion with the Khond or Konda Dora tribes, both of which have lost ground. Three gipsy tribes—Yerukalas, Yānādis and Lambādis—show an increase of over 20 per cent, probably due to the elasticity

of their formations. In spite of the general loss of population in the Agency, the Gadabās and Savaras have gained largely and unaccountably.

Muhammadans

260. There is no feature worthy of note in the figures of the Muhammadan community. The Labbais have decreased slightly, but this is no uncommon phenomenon, as the prosperous Labbai is wont to claim membership of the Sheik, Saiyad or Pathān tribes. The now notorious Māppillas have increased by 6·5 per cent, owing, in part at least, to conversions from among the Cherumans.

Europeans

261. The number of persons of European or of allied races has fallen from 14,905 to 10,836 since 1911. Of these, 9,950 are British subjects. The Nilgiris heads the list of districts, with Madras second, thus reversing the order of 1911. No doubt the partial Indianization of the services and the fall in the standard of comfort are responsible for the decrease in the total. The German community has, not unnaturally, fallen from 545 to 11.

Anglo-Indians

262. The total number of Anglo-Indians has also fallen from 26,023 to 23,492. Of these, over one-third are inhabitants of Madras City. It is interesting to observe that the tendency to city life is much more pronounced among this community than among the Europeans. In view of their non-emigratory habits, it must be assumed that economic causes are at the root of the decrease. It is possible too that the tendency of the more prosperous Anglo-Indian to describe himself as European may in some measure account for the decrease in the total.

Indian Christians

263. The Indian Christian community has, in the last decade, risen in number from 1,168,000 to 1,346,000. The increase is most noticeable in the Kistna, Kurnool and Guntūr districts, where the Mālas and Mādigas seem to have offered the most fruitful ground for mission agencies. Tinnevelly retains its position as first among the Christian districts.

Languages

Dravidian

264. In the Madras Presidency Dravidian languages predominate, the actual number per thousand of the population who speak Dravidian tongues being 924. Of the rest, Aryan, Munda and European languages claim 70, 5, and 1, respectively, per thousand. Again, Madras supplies 68 per cent of the Dravidian-language-speaking portion of the total Indian population. Tamil and Telugu alone are the mother-tongues of 787 per mille of the population. Next in order of strength come Malayālam, Oriyā, Kanarese and Hindustani. Tamil and Malayālam have increased by 3 and 1, respectively, per mille, chiefly at the expense of Oriyā and Kanarese. The list of thirty-two languages and dialects given in the Linguistic Survey and followed in the recent Census gives, on paper, an impression of an incomprehensible Babel which in reality does not exist; the areas of influence of many of the smaller tongues are very limited, and even Malayālam and Oriyā are confined to two or three districts. Even in the few places—such as, perhaps, the commercial quarter of Madras or parts of the Nilgiris—where many tongues meet, the diffusion of Tamil or English among all classes prevents any difficulty of communication. The Agency division is in reality the only part of the Presidency which can be truthfully described as a welter of tongues; it is interesting to note that in the Agency there is no sign of the aboriginal languages being ousted by the more civilized tongues. But the returns show that in the Presidency as a whole tribal languages have fallen by almost 50 per cent from the 1911 figure.

Mussalman

265. At the recent census a record was made for the first time of the languages spoken by the Muhammadan community. Over one-third of the total Muhammadan population use Malayālam in daily conversation; these are, of course, almost entirely Māppillas. Another third are returned as speaking Hindustani. The remainder are grouped chiefly under Tamil and Telugu, in the proportion, roughly, of four to one. If adherence to Hindustani be taken as the criterion of true Northern descent, the Pathāns, Sheiks and Saiyads are much more truly direct descendants of the invaders than the Labbais, of whom 91 per cent speak

English

Tamil and only 3 per cent speak Hindustani. The number of English-speaking persons is a trifle over 37,000; these are found mainly in Madras, the Nilgiris, Chingleput and Malabar. Considering that the total of Europeans and Anglo-Indians together is 34,328, the figure suggests that the number of Indian-born subjects who, either through the influence of a Western education or from their local circumstances, prefer English to their mother-tongue is very small indeed.

CHANGES IN THE ADMINISTRATION (1921-22)

266. His Excellency the Right Hon'ble Lord Willingdon, G.C.S.I., G.C.I.E., G.B.E., continued to hold office throughout the year. The Ministry suffered a serious loss by the resignation in July 1921, of the Hon'ble Diwan Bahadur A. Subbarayalu Reddiyar, and his death soon afterwards. His place as Minister in charge of Education and Public Works was taken by the Hon'ble Rao Bahadur A. P. Patro. The Hon'ble Sir Charles Todhunter, K.C.S.I., Finance Member of Council, was absent on leave for six months from May till October 1921, his place being taken by the Hon'ble Mr. A. R. Knapp, C.S.I., C.B.E., who also, at the end of the year, succeeded to the permanent vacancy caused by the resignation of the Hon'ble Sir Lionel Davidson, K.C.S.I.

HIS EXCELLENCY THE GOVERNOR'S TOURS

267. En route to Ootacamund in April 1921, His Excellency the Governor, accompanied by Her Excellency, visited the Salem district and the town of Karūr in the Trichinopoly district. Leaving Madras on the 9th April Their Excellencies reached Salem the next day where the District Board presented an address, and the Shevapet Merchants' Association and the Indian Christian community waited upon His Excellency in deputation. Their Excellencies also paid a flying visit to Yercaud. From Salem Their Excellencies proceeded to Karūr where they opened the hostel attached to the High School and laid the foundation stone of a Girls' School. They arrived at Ootacamund on the 13th April. On the 16th May Their Excellencies left Ootacamund and spent the 17th in Madras, where His Excellency received a deputation of the ratepayers of Chintadripet on the question of alienating a portion of Napier Park as a site for a theatre. In the evening he opened the Tuberculosis Institute. His Excellency then proceeded to Simla at the request of His Excellency the Viceroy and returned to Ootacamund on the 9th June. His Excellency visited Madras from Ootacamund on the 4th July in connexion with the grave situation caused by the mill strike, and inspected the disturbed area and the refugees' camp. He also received a deputation of labour leaders and men to whom he declared the determination of Government to preserve law and order. His Excellency returned to Ootacamund on the 10th July. On the 24th July he left Ootacamund for Madras and remained there till the 11th August, when he left for Colombo. During his stay at Colombo His Excellency received a deputation from the Ceylon Indian Association and an address from the Indian Association of Ceylon on several matters concerning the welfare of Indian residents, including the labour question. Their Excellencies came back to Madras on the 22nd August and His Excellency returned to Ootacamund on the 2nd September. On the 5th September His Excellency again proceeded to Madras and from there visited Tirur and Calicut in connexion with the Māppilla rebellion and conferred with the civil and military authorities regarding the measures for the suppression of the disturbance. He returned to Madras on the 12th September and to Ootacamund on the 17th of the month. In

October His Excellency toured in the Tanjore, Trichinopoly and South Arcot districts. Leaving Madras on the 23rd October Their Excellencies first arrived at Tanjore and then visited Tiruvālūr, Negapatam, Māyavaram, Tranquebar, Kumbakōnam, Trichinopoly, Srīrangam, Cuddalore and Nellikuppam. Besides receiving addresses from local bodies and deputations and visiting several institutions of importance, His Excellency attended several functions, the most important of which was the laying of the foundation stone of the "Pethachi Buildings" for the National College and the opening of the Local and Municipal Conference at Trichinopoly. The opportunity was taken during this tour of visiting Pondicherry after which Their Excellencies returned to Madras. On the 22nd December Their Excellencies left Madras for a tour in Malabar to inspect the refugees' camps at Ottapalam, Kavalappara and Calicut which had been opened as a result of the Māppilla rebellion. His Excellency also received a deputation from the leading people of Malabar and discussed with them the question of the remission of kist and other matters arising out of the rebellion. On the invitation of His Excellency the Viceroy, His Excellency visited Delhi in February 1922 and returned to Madras on the 3rd March.

RELATIONS WITH TRIBUTARY STATES AND FRONTIER AFFAIRS

TRAVANCORE STATE

(M.E. 1096—16TH AUGUST 1920 TO 15TH AUGUST 1921)

[*Report on the administration of the Travancore State for the year 1096 M.E., 1920-21 A.D.*]

[The Maharaja, His Highness Sri Padmanabha Dasa Vanchi Pala Sir Rama Varma Kulasekhara Kiritapati Manney Sultan Maharaja Raja Rama Raja Bahadur Shamsher Jang, G.C.S.I., G.C.I.E., is a Kshatriya. His age is 65 and he has a male heir. The area of the State is 7,625 square miles and the population, according to the census of 1921, is 4,006,062. An annual subsidy of Rs. 8,10,652 is paid to the British Government. A military force of 1,485 all ranks is maintained]

General

268. In October 1920 His Highness the Maharaja received a visit from Their Excellencies the Governor of Madras and Lady Willingdon. In June 1921 His Highness stayed for some four weeks at Bangalore and took advantage of the opportunity to pay a visit to His Highness the Maharaja of Mysore. M.R.Ry. Diwan Badadur T. Raghavayya Pantulu Garu held the post of Diwan throughout the year.

Revenue and finance

269. The revenue receipts (Rs. 1,94,70,130) exceeded even last year's record figure, while the ordinary expenditure (Rs. 1,96,17,244) exceeded last year's record by Rs. 19 lakhs. Taking into account the capital expenditure on Railways, the year showed a deficit of Rs. 1,79,881, the closing Darbar balance being Rs. 64,64,394. The increase in revenue was most notable under Salt, Excise and Customs, while Land Revenue showed a slight decrease. The increased charges fall mainly under Education, Public Works and temporary allowances to the lower grades of Government servants.

Protection and legislation

270. The Legislative Council met four times during the year, and nine regulations were passed. One Emergency Regulation, in force for six months of the year, was also passed. A noteworthy innovation was the constitution of an Economic Development Board, composed of official and non-official experts, whose duty it is to advise the Darbar on all matters affecting the resources of the State. The strength of the police force at the close of the year was 2,150, the increase being due to the employment of a special temporary force to guard the most important temples against incendiarism, in consequence of two temples having been burned down. Robbery was the only form of grave crime which showed an increase over last year. Economic prosperity accounts for the decrease in the more casual offences. Murders decreased slightly. The number of courts

Police

Criminal justice

exercising criminal jurisdiction decreased from 80 to 79. The total number of offences reported fell from 22,940 to 22,918, but Penal Code cases contributed only to a trifling extent to this decrease. The percentage of convictions fell from 40 to 36. The number of female offenders and of juveniles accused showed an increase, but the number of juveniles brought to trial was less than in 1095 M.E. Theft was the principal juvenile crime. The number of cases filed fell from 22,940 to 21,298. Arrears showed a satisfactory reduction, but the average duration of cases increased. Committals to the Sessions rose from 320 to 338; of the persons charged before these courts 42 per cent were convicted. In both the Sessions and the High Courts the volume of appellate work has grown.

Prisons

The average daily strength in the prisons fell from 417 to 406. The total prison population was 1,201 as against 1,283 last year, and the closing strength was 428 as against 446. These figures and the criminal courts' statistics seem to indicate that there has been no considerable alteration in the amount of crime.

Civil justice

The enlargement of the pecuniary jurisdiction of all the village panchayat courts and the territorial jurisdiction of four of them resulted in an increase in the work before them (5,747 suits as against 4,544). In the Munsifs' Courts, on the other hand, the number of institutions fell from 69,115 to 60,533. The total number of original suits and appeals in all courts fell from 78,688 to 71,753—the lowest for five years. Although the average duration of contested and uncontested suits rose, the figures show that this is, accounted for in the case of Munsifs' Courts and of second appeals in the Chief Court, by the fact that an unusually large number of old suits were finally disposed of. The appellate work in District and High Courts rose from 4,152 to 4,583.

Registration

Both the number and value of the documents presented for registration fell below last year's record figures—305,037 and Rs. 9,95,91,698 as against 327,165 and Rs. 11,14,27,824. But last year apparently was abnormal. The transactions involving immovable property, amounting to 95 per cent of the whole although fewer than in last year, were comparatively high.

Production and distribution

271. It cannot be said that the agricultural season was good, though the rainfall was only slightly below the mean average. Last year's high prices and inflated wages continued.

Agriculture

Various plant pests were investigated and action was taken to check the ravages of one particular enemy of the coconut palm. Experiments proved the value of groundnut and castor cake as manures for paddy land and of dried sardine as a means of overcoming alkalinity in the soil. The ryots have shown a growing appreciation of the value of scientifically spaced transplantation.

Veterinary.

The beneficial result of manuring coconut topes, which yield one of the State's most important crops, was successfully demonstrated. Rinderpest did some damage in South Travancore, but other cattle diseases were negligible.

Loans

The procedure under the Loans Regulation has been simplified during the year and a liberal allotment under this head has been included in the current budget.

Co-operative societies

An exhibition held at Trivandrum in October 1920 proved a great stimulus to agricultural and industrial interests. During the year 92 new co-operative societies were registered, making an increase of over 50 per cent in the total number. Special officers are under training in the Madras Presidency. Unsatisfactory features are the failure of societies to collect arrears of principal and the stagnation of stores societies.

Factories

The control of the 143 factories was satisfactory.

Trade

The total volume of external trade rose from Rs. 10·32 crores to Rs. 11·41 crores, the respective percentages of import and export trade being 41·8 and 58·2 as compared with 44·2 and 55·8 per cent in last year. Under exports, copra, coir, fish, coconut oil and pepper showed notable increases, while it is not surprising to find a very heavy decrease under tea and rubber. Last year's rice and paddy imports fell by 25 per cent owing to the cessation of imports of controlled rice and paddy.

Ports

British India as usual was the State's biggest customer. The ports were visited by 96 steamers as compared with 37 in the previous year. Probably as a consequence of this the number of country craft engaged in the trade fell off considerably.

272. The birth and death-rates were respectively 21·5 and 14·1 per mille as against 19·4 and 19·2 in 1095 M.E. The lowered death-rate was largely due to the absence of epidemics; cholera and small-pox cases fell from 1,133 and 1,333 to the remarkable figures of 4 and 80. No cases of indigenous plague occurred. That all-embracing heading "fever," showed a decrease from 25,000 to 17,000. The number of vaccinations again rose from 228,503 to 230,562. In the hospitals the number of in-patients remained stationary, while the number of out-patients increased from 842,000 to 921,000. **Vital statistics and medical services** Vaccination Hospitals

273. A successful conference of officials and non-officials was held during the year, when many points regarding the school curricula and grading were discussed. The number of recognized institutions rose from 2,939 to 3,112 and of scholars from 376,000 to 393,000. The efforts of the Darbar to encourage private educational effort had their reward in a marked increase in the number of non-departmental schools. The estimated percentage of children attending recognized schools rose from 62·6 to 65·4. Education among some of the lower classes showed a marked advance, and the attendance at English schools exceeded the 1095 figure by 17·3 per cent. **Education**

274. The sixth decennial census was taken on March 18, 1921. Its operations were guided by a Regulation passed during the year. The total figure was 4,006,062, an increase of about 16·8 per cent over the figures of 1911. The Christian section showed the largest increase. Literacy increased from 150 to 241 per mille, the increase of literacy among females alone being from 50 to 150 per mille. **Census**

COCHIN STATE

(M.E. 1096—16TH AUGUST 1920 TO 15TH AUGUST 1921)

[*Report on the administration of the Cochin State for the year 1096 M.E.*]

[His Highness Sri Sir Rama Varma, G.C.I.E., Maharaja of Cochin, a Kshatriya, is 64 years of age and has male heirs. He pays an annual tribute of Rs. 2,00,000; the sanctioned military strength is 276 all ranks. The population, according to the census of 1921, is 979,019 and the area is 1,417 square miles]

275. On the 1st January 1921 the title of Maharaja was conferred as a hereditary distinction on the Ruler of the State and the sanad was presented to His Highness at a State Darbar on the 7th June. Their Excellencies the Governor of Madras and Lady Willingdon visited the State in October 1920, His Excellency taking the opportunity to spend a few days in the forests and to travel by the tramway. M.R.Ry. Diwan Bahadur T. Vijayaraghava Achariyar held the post of Diwan throughout the year. **General and political**

276. The year's receipts showed a decrease of about Rs. 3 lakhs from the previous year and the expenditure increased by over Rs. 1 lakh. The closing balance was Rs. 30·29 lakhs. The expenditure actually exceeded the receipts by Rs. 43,097, but this was mainly due to the late receipt from the British Government of about Rs. 1 lakh on account of customs. The decrease in revenue was in accordance with anticipations, that of the previous year having been swelled by windfalls. The increased expenditure was due chiefly to the larger working cost of the railway, and to a revision of the palace contribution. On the other hand the programme of Public Works returned to more normal limits. **Revenue and finance**

277. During the year His Highness promulgated eleven Regulations and issued four Proclamations. One of these announced the intention to establish a Legislative Council with a large elected majority and in pursuance of this, draft rules on the subject of elections and the conduct of business were published for criticism. The rules and the various opinions received on them were still under consideration at the end of **Protection and legislation** Police

the year. The Armed Police Reserve was re-organized and the total strength of the police force was 593 all ranks. The number of grave crimes fell from 655 to 377, theft showing the most notable decrease; doubtless more favourable economic conditions accounted for the change.

Criminal justice

The percentage of convictions in police cases before Magistrates fell slightly, and the total number of cases filed fell from 2,889 to 2,413; the percentage of convictions in all cases fell from 30·3 to 27·5, while in 31·5 per cent of appealable sentences passed by Second-class Magistrates appeals were preferred; the pecentage of sentences confirmed on appeal was 56·2 as against 43·9 in last year. Appeals to the Sessions Courts fell from 48 to 37, and the percentage of confirmations rose enormously, from 40·4 to 70·8; but in the Chief Court the percentage fell equally markedly, from 85·1 to 35·9.

Prisons

The average daily prison population fell from 170 to 140.

Civil justice

In addition to the Munsifs' Courts, 27 Village Panchayat Courts exercised civil jurisdiction in small cause suits and their files increased notably in response to the raising of their jurisdiction from Rs. 30 to Rs. 50. The other Civil Court figures show no remarkable change.

Registration

The number of documents registered fell from 61,618 to 56,407, while the average value increased. During the year 36 joint-stock companies were registered.

Production and distribution

278. There was a small increase in the cultivated area due to assignments of waste and poramboke lands. The land revenue demand rose correspondingly from Rs. 10·79 lakhs to Rs. 10·82 lakhs. The percentage of collections remained, as in last year, at the high figure of 99·9.

Land revenue

Agriculture

The Agricultural department continued its experiments in planting and manuring and had some success in combating insect pests and crop diseases. Twenty new co-operative societies were started and though they did not all work there was an appreciable rise in the total membership and in subscriptions and the repayments of loans continued to be satisfactory. The loans advanced rose from Rs. 1·88 lakhs to Rs. 2·13 lakhs.

Forests

The receipts from forests fell heavily, owing mainly to the suspension of transport while one of the bridges on the tramway was under repair.

Railway

The net earnings of the railway showed a return of 6·13 per cent on the capital sunk, a marked improvement on the previous year's figure.

Public Works

The expenditure on State works fell from Rs. 11·88 lakhs to Rs. 9·07 lakhs, most of the important buildings under construction in 1095 having been completed and less money being available.

Vital statistics and medical services

279. There was a complete absence of epidemics and the recorded death-rate fell from 14·68 to 10·87 per mille, while the birth-rate rose from 15·48 to 16·55 per mille. Cholera and small-pox claimed only 62 and 31 victims, respectively, as against last year's 357 and 372.

Medical relief

Medical institutions increased in number from 30 to 33, and both the out-patient and in-patient totals show a marked increase. There was a very slight decrease in the number of vaccinations performed.

Education

280. The number of aided schools remained at 273 but that of Government schools rose from 160 to 171 and the number of pupils in the two together from 75,778 to 84,933 and the education imparted in general maintained the high standard of previous years. There was a further increase of two high schools and ten primary schools and a revision of the Education Code included a raising of stipends which it is hoped will improve the qualifications of the teachers employed. Further special measures were adopted to encourage the education of children of the backward classes; in addition to the opening of special schools in selected localities and the offer of scholarships, clothing and meals, a new and exhaustive list was compiled of the backward classes to whom the concession of half fees might be applied; and the results as shown by the number of pupils attracted are decidedly promising.

Census

281. The decennial census, taken on the 19th of March 1921, revealed an increase of only 6·6 per cent during the decade, as against 13·06 in the previous decade.

PUDUKKŌTTAI STATE

(FASLI 1331—1ST JULY 1921 TO 30TH JUNE 1922)

[Report on the administration of Pudukkōttai for fasli 1331]

[The Raja, His Highness Sri Brihadamba Bhairava Tondaiman Bahadur, G.C.I.E., is a Kallar by caste and is 46 years of age. The population of the State, according to the census of 1921, is 426,813. The Raja pays no tribute and maintains a military force of 19 cavalry and 110 infantry. The Collector of Trichinopoly is ex-officio Political Agent and the office of State Superintendent is held by a member of the Indian Civil Service]

General and political

282. His Highness the Raja stayed in Europe throughout the year. There was no change in the personnel of the State Council which carries on the administration of the State. The Representative Assembly inaugurated in 1902 has 30 members on its rolls, of whom 5 only are nominated and the rest elected by the people. It meets twice a year at the capital when the Darbar gives it an account of the progress made in the several departments, replies are given to interpellations by members and a discussion is held on suggestions brought forward by them. There is also a Legislative Advisory Council composed of four official members (the three members of the State Council and the State vakil) and six non-official members of whom four are elected by the Members of the Representative Assembly and two are nominated by the Raja. All legislation which it is proposed to enact comes before this council as also does the annual budget, but as its name implies its functions are purely advisory.

Revenue and finance

283. The actual receipts for the fasli amounted to Rs. 21·39 lakhs as against Rs. 21·43 lakhs in fasli 1330. The collections under Land Revenue rose by Rs. 24,000, through the collection of arrears and the sale of house-sites ; the increase in civil litigation resulted in an increase of Rs. 13,000 under "Stamps." The revenue from excise fell by Rs. 41,000 ; the decrease was due to political agitation and to the reduction in the number of arrack and toddy shops. The expenditure for the fasli was Rs. 24·53 lakhs, an increase of Rs. 3·87 lakhs on last year's figure ; there was a rise under practically all the expenditure heads. The opening balance was Rs. 39·03 lakhs, the deficit for the fasli was Rs. 3·14 lakhs and the closing balance was thus Rs. 35·89 lakhs.

Production and distribution

284. The rainfall, though not much below the average, in total quantity, was unseasonable; the harvests were therefore poor. While the owners of land suffered, however, the labouring classes were comparatively well off in spite of the high prices of food-grains, owing to the demand for labour on works and the rise in the rate of wages. The condition of cattle was good. The net increase in the extent of patta land was 2,623 acres. No advantage was taken of the offer of the Darbar to remit the assessment on lands cultivated with fodder crops. The number of co-operative credit societies rose from 40 to 45, of which 34 were agricultural ; the amount of interest shown by these societies in agricultural development is still inadequate. The disbursements under agricultural loans rose to nearly five times the figure of last fasli. Methods of agricultural improvement were discussed at the meeetings of the advisory committee organized during last fasli. Almost Rs. 7 lakhs were spent on public works. The small supplies of water received in the tanks permitted the execution of unusually extensive repairs, and two bridges were constructed on the main roads.

Public works

Protection and legislation

285. The Legislative Advisory Council held two meetings, at one of which the budget estimate for fasli 1332 and at the other the Draft Agricultural Pests and Diseases Regulation were discussed. Six regulations were passed, the only original regulations being the Agricultural Pests and Diseases Regulation and the Poisons Regulation. The Arms Rules and the Legal Practitioners' Rules were thoroughly revised. At the close of the fasli the police force was two short of its sanctioned strength of 277 all ranks. The improvement in discipline noticed last year was maintained. Detection is still hampered by the

Police

prevalence of the habit of compromising with thieves by the payment of "tuppukuli" for the recovery of stolen property. The total number of offences reported rose from 1,538 to 1,697, and the number of cognizable cases increased from 395 to 575. The percentage of detections fell from 28 to 24, and the percentage of property recovered fell from 17 to 14. Of the 323 persons arrested in cases of grave crime, 125 were convicted. The

Criminal justice

number of offences on the files of the Magistrates was 2,342 under the Indian Penal Code and 3,428 under other laws as against 2,245 and 2,358 in fasli 1330; the large increase under the latter head was due to increased prosecutions under the Forest and Police Regulations. The percentage of disposal fell from 91·68 to 90·1, but the average duration of cases fell

Civil justice

from 12·32 days to 11·16 days. In the civil courts, the total number of original suits and appeals together was 10,742, an increase of 7·09 per cent on the previous figure. The percentage of disposal fell from 76·18 to 70·19; there was a general improvement in the disposal of Small Cause suits. The number of regular appeals for disposal rose from 319 to 362; the percentage of disposal (47·79 per cent), although a slight improvement on the previous figure, was far below the 72·72 per cent of fasli 1329. Two practising vakils were punished during the year for misconduct, one being suspended and the other deprived of his sanad; the latter was subsequently re-instated on his offering an apology. The number of prisons was nine, as in last year. The daily average jail population was 98·90 as against 88·87 in fasli 1330. Five prisoners escaped from the jails; all of them have since been re-captured. Jail offences decreased slightly, and the general health of the prisoners was good. During the fasli a jail school was opened and it is reported to be doing good work.

Vital statistics and medical services

286. Fever and small-pox claimed fewer victims than in last fasli, but the number of deaths from cholera rose. The birth-rate fell from 20·86 to 19·94 per mille of the population, while the death-rate also fell from 18·28 to 15·14. The rate of infantile mortality continued to rise, and the number of deaths among children of under six years of age is excessively heavy. That the confidence of the people in the clumsy village midwife has not diminished is abundantly clear from the confinement figures; trained assistance was only made use of in 367 cases of labour. The total number of patients treated in the State Medical Institutions rose by 15,747 to 150,341, and the daily average rose from 834 to 963. The existence of another hospital and the opening of a new Ayurvedic dispensary caused a slight decrease in the number of in-patients and out-patients in the General Hospital. The rural dispensaries attracted 73,418 patients, compared with 68,971 in last fasli. The number of vaccinations rose from 13,056 to 15,455.

Education

287. During the fasli 38 new educational institutions came into existence in the State, bringing the total up to 530. The total number of scholars in State and aided schools and in private schools was 25,592 and 2,029 respectively. Girl pupils rose in number in the State and aided schools by about 5 per cent. The percentage of both boys and girls of school-going age who were under instruction increased from 38·69 to 41·56. Except in the capital, elementary education is now free throughout the State. It is apparent from the small attendance at the Rani's Secondary school for girls that the higher forms of study cannot at present attract a sufficient number of girls, and the school is accordingly to be reduced to the status of an elementary school. The training school for teachers, the College of Oriental Studies and the Weaving School continued to do useful work. The number of pupils at the College fell from 593 to 564; the partial or complete failure of almost all the candidates at the Intermediate Examination of the Madras University was far from satisfactory.

BANGANAPALLE STATE

[*Administration Report of the Banganapalle State for the official year 1921–22*]

[The Nawab of Banganapalle, Nawab Mir Fazle Ali Khan Bahadur, succeeded to the gadi at the age of 21 in January 1922. He maintains no military force and pays no tribute. The census of 1921 showed a population of 36,646. The Collector of Kurnool is Political Agent]

General

288. The Nawab, Mir Ghulam Ali Khan Bahadur, died of *angina pectoris* on the 22nd of January 1922, after a short illness. His death was a great loss to his people, to whom he had endeared himself by his devotion to State affairs and by his interest in the communal welfare. He was succeeded by his eldest son, who has had the advantage of education at the Mayo College, Ajmere.

Finance

289. The year's receipts rose from Rs. 2·56 lakhs to Rs. 3·70 lakhs, exclusive of debt heads, chiefly owing to the collection of arrears of land revenue. The charges rose also from Rs. 3·32 lakhs to Rs. 3·54 lakhs, the increase being chiefly under "Public Works" and "Village Establishment."

Protection

290. The volume of crime remained practically stationary, 84 cases being registered as against 80 during last year. There was a very satisfactory rise in the percentage of property recovered from 9·05 to 32·89. Of 401 persons brought to trial, 71 were convicted and 251 discharged or acquitted. The Nawab, the Diwan and the Tahsildar-Magistrate exercised original criminal jurisdiction and the Nawab sat as an appellate authority. The Diwan disposed of one civil suit and the Munsif dealt with 225 suits. The average daily jail population rose from 8·84 to 11·49.

Production and distribution

291. A deficient rainfall, 10 inches below the average, led to a partial failure of crops in five villages. Food-grain prices ruled high as in last year, but the poorer villagers were helped to some extent by an extension of the existing privileges of free removal of firewood. As usual the ryots of the State were allowed free grazing for their plough cattle. The forest administration was efficient and satisfactory.

Vital statistics and medical services

292. Deaths fell in number from 634 to 615, while births increased from 749 to 1,014. An absence of epidemics was responsible for these favourable figures and for a good record of public health. The average daily number of in-patients in the State hospital remained stationary, while that of out-patients fell from 82 to 75. Vaccinations fell slightly from 1,890 to 1,795.

Public works

293. There was an expansion of public works, partly for the purpose of relief; the construction of several much-needed bridges was pushed on, and some improvements were carried out in the public offices. The total expenditure was Rs. 64,934.

Education

294. There was an increase of 103 in the number of pupils in the State and aided schools. An encouraging feature was the steady increase of girl students, for whom a new school was opened during the year. The annual examinations showed improvingly satisfactory results. Grants were made to fifteen mission and private schools, and four students were aided with scholarships.

SĀNDŪR STATE

[*Administration Report of the Sāndūr State for the official year 1921–22*]

[The Raja of Sāndūr, Raja Srimant Venkata Rao, Rao Sahib Bhosle, Hindu Rao Mamlukatmadar, Senapati, Ghorapade, is a Mahratta, aged 30 years. He pays no tribute and maintains no military force. The area of the State is 167 square miles and the population, according to the 1921 census, is 11,686. The Collector of Bellary is ex-officio Political Agent]

General

295. In January 1922, the Raja and the Rani attended the functions at Madras in connexion with the visit of His Royal Highness the Prince of Wales with whom the Raja had an informal interview. The office of Diwan

was held until the 18th of November 1921 by M.R.Ry. K. Hanumanta Rao Garu, Deputy Collector, and from that date by M.R.Ry. A. Subbayya Garu.

Finance

296. The receipts during the year amounted to Rs. 1·17 lakhs, an increase of Rs. 14,000 over the previous year's figure and the expenditure to Rs. 1·10 lakhs, a decrease of Rs. 1·20 lakhs due to the fact that the figure for 1920-21 included payment of the Raja's debts. The closing balance was Rs. 2·86 lakhs.

Protection

297. The number of crimes rose from 36 to 48, the majority being the work of a band of dacoits who finally left the territory without being caught. In the 17 cases charge-sheeted, 18 persons were convicted and 14 persons were discharged or acquitted. The Diwan, in the exercise of his powers as Additional Sessions Judge, dealt with 83 cases as against 118 during last year, and in his capacity of District Munsif he dealt with 83 suits as against 88. The Raja disposed of one criminal appeal, awarding enhanced punishment: no civil appeals were dealt with. The jail expenditure fell from Rs. 763 to Rs. 684, the average daily population remaining practically stationary. The value and number of documents registered rose from Rs. 16,000 and 126, respectively, to Rs. 51,000 and 157, respectively.

Jail

Registration

Production and distribution

298. The rainfall, although heavier than usual, was too long delayed to ensue really good crops ; but the season cannot be called unfavourable. A strict control of the export of cholam and cumbu kept prices on a reasonable plane at a time when in the bordering British territory prices of grains had risen abnormally. The forests, which include valuable sandalwood plantations, gave employment to a large number of labourers, and the General Sāndūr Mining Company utilized a certain amount of local labour and paid the State Rs. 49,000. There were no indigenous industries worthy of the name.

Vital statistics and medical services

299. The number of births rose from 322 to 402 and the deaths numbered 210 as against 217. The public health was uniformly good. In the State dispensary 9,855 patients were treated as against 10,407 last year. Two imported cases of plague were reported. A new dispensary is now under construction.

Education

300. There are ten Hindu and two Muhammadan elementary schools in the State, and one middle school. Primary education has recently been made compulsory : but during the year the total number of pupils fell from 412 to 401. A scheme is on foot for instituting a high school in Sāndūr town.

CONDITION OF THE PEOPLE

(FASLI 1331—1ST JULY 1921 TO 30TH JUNE 1922)

[*Season and Crop Report for fasli 1331 ; Department of Statistics, India ; Prices and Wages in India*]

301. The stocks of grain were generally sufficient and there were no tracts requiring special notice on the ground of any permanent lowering in the standard of agricultural prosperity. The prices of the principal food-grains were generally below the level of those prevailing in the previous fasli in the Circars, the Deccan and Nellore ; they were higher than last year in the Nilgiris ; in the rest of the Presidency, they were generally lower in the first half and higher in the second half of the fasli. In spite of the general fall in prices, wages continued to be high, leaving a larger margin of saving for casual coolies in receipt of money wages. The wet lands of the Gōdāvari and Kistna deltas had a very prosperous season. The condition of the agricultural population in the districts of Kurnool, Bellary and Anantapur was worse than in last year. The early-sown crops gave very poor yields. The situation was saved to some

extent by the heavy rains which fell in October 1921 and the generally good yield of white cholam. Famine was declared in the taluk of Kurnool in the middle of November 1921, but the relief works were closed by the end of the next month. Relief works were opened in four taluks of Bellary and one taluk of Anantapur in the middle of March 1921 and they lasted for about a year. The high market rates of cotton and groundnut made for prosperity. The yield of paddy in Tanjore was much affected by drought. The people of Malabar suffered from the Māppilla rebellion, the low yields of paddy and pepper and the fall in the price of their commercial crops, pepper and coconut. On the whole, many signs of improvement were noticeable in the fasli. More wells were sunk and the tendency to convert dry fields into garden lands was more marked. Oil-cake was more largely used and green manuring was successfully adopted. Better varieties of crops were grown, and there was a demand for improved implements. The insufficiency of manures continues to be a serious handicap to the increased yield of crops in general, and the prohibition of the export of indigenous manures such as fish, bones and oil-cake appears to be the only remedy.

POLITICAL PENSIONS (1921–22)

302. The political pensions in force on the 1st April 1921 amounted to Rs. 2,68,166–1–0 and were distributed among 470 pensioners. During the year, pensions amounting to Rs. 2,658–9–0 were newly sanctioned and the amount that lapsed was Rs. 12,308–3–0. There were no cases of transfer of pensions from or to other provinces. Twenty-nine pensioners died during the year and 19 new pensioners were added to the list. The pensions of three persons were commuted. The pensions in force on the 1st April 1922 amounted to Rs. 2,58,516–7–0 and were distributed among 457 pensioners. The payments made to the Carnatic Stipendiaries and to the Tanjore family aggregated Rs. 1,93,561–5–2 and Rs. 30,603–0–5 respectively. The former amount included a sum of Rs. 1,748–10–10 disbursed in commutation.

CHAPTER II

ADMINISTRATION OF THE LAND

SOURCES AND REALIZATION OF LAND REVENUE

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Report on the settlement of Land Revenue for fasli 1330; Statistics of British India, Vol. II—Financial Statistics, Part II—Land Revenue*]

Sources of land revenue

303. The land revenue of the Presidency is derived from the following sources :—(*a*) Peshkash or revenue from permanently-settled estates, (*b*) Shrotriyam jodi or quit-rent levied on inam villages, (*c*) Assessment, including water-rate, on lands held under the ryotwari system, (*d*) Miscellaneous revenue and (*e*) Proprietary estates village service. The total current demand under all heads of land revenue and cesses was Rs. 791·17 lakhs against Rs. 797·51 lakhs in the previous fasli, of which Rs. 756·96 lakhs or 95 per cent was collected within the fasli and Rs. 6,490 was written off.

Peshkash
Quit-rent
Ryotwari

The revenue from peshkash was nearly the same as in the previous fasli (Rs. 49·87 lakhs) while that from shrotriyam jodi fell slightly from Rs. 7·57 lakhs to Rs. 7·56 lakhs. The total extent of ryotwari holdings was 26·13 million acres as against 26·02 million acres in the previous year. The increase was contributed to by all the districts except Gōdāvari, Bellary and Kurnool and was marked in South Arcot. Bellary showed the largest decrease, due mainly to the relinquishment of inferior land consequent on the unfavourable character of the season. The total assessment on holdings rose, by Rs. 3·67 lakhs, to Rs. 537·67 lakhs which was contributed to by all districts except Bellary. The increase was marked only in South Arcot (Rs. 2·83 lakhs) where the resettlement rates were introduced during the year. The total area cultivated in ryotwari holdings during the year was 19·91 million acres against 20·00 million acres in the previous fasli. The area under wet and dry cultivation showed a decrease of 46,633 and 38,202 acres, respectively. The decrease under dry was marked in the districts of Kurnool, Madura and Tinnevelly and under wet in Anantapur. Including the area under "miscellaneous cultivation" the total area cultivated was 20·91 million acres against 20·92 million acres in the previous year. The revenue under water-rate and second-crop charges fell from Rs. 39·44 lakhs to Rs. 34·70 lakhs, due mainly to the unfavourable character of the season. As compared with the previous

Remissions

year there was a large increase in "season remissions," but slight decreases under "fixed remissions" and "beriz deductions." The net increase under

Miscellaneous

all the three heads amounted to Rs. 6·73 lakhs. The receipts under "miscellaneous revenue" rose, by Rs. 1·35 lakhs, to Rs. 100·41 lakhs. The current demand under cesses remained the same (Rs. 76·06 lakhs). The net ryotwari demand, including water-rate, second-crop charge and miscellaneous revenue and deducting remissions, amounted to Rs. 651·09 lakhs against Rs. 657·54 lakhs in the previous year. The total balance of land revenue and cesses outstanding at the end of the fasli including both arrears and current was Rs. 35·50 lakhs against Rs. 20·72 lakhs in the previous fasli.

Collections

304. The charges of district administration including the salaries and allowances of revenue inspectors but excluding those of village establishments were Rs. 82·32 lakhs or 10·87 per cent of the land revenue and

cesses realized against 8·05 per cent in the previous fasli. Village service charges (including proprietary estates) during the fasli were Rs. 120·29 lakhs. Including this sum the total charges debitable to land revenue were Rs. 202·61 lakhs or 26·76 per cent of the collections against 17·6 per cent in the previous fasli.

Coercive processes

305. The percentage of actual sales of property to the number of sale notices was 12·29 against 14·53 in the previous fasli and the percentage of defaulters to the total number of pattas was 0·08 as against 0·12 in the previous fasli. Immoveable property of the estimated value of Rs. 2·34 lakhs was sold for the recovery of arrears amounting to Rs. ·43 lakh and Rs. ·94 lakh was realized, the corresponding figures for the previous year being Rs. 7·08 lakhs, Rs. 0·81 lakh and Rs. 1·63 lakhs. The sales were most marked in South Arcot and Madura : in the former case the large number of sales was due to the state of the money market and stagnation in the groundnut trade. The extent of " dry " and " wet " land sold was 12,932 and 3,086 acres, respectively, against 13,216 and 3,203 acres in fasli 1329. The total area of land bought in by Government for want of bidders was 5,043 acres of " dry " and 913 acres of " wet " against 5,061 acres of " dry " and 1,431 acres of " wet " in fasli 1329.

Transfers of registration

306. The number of applications for transfer of revenue registration received from sub-registrars fell, by 48,216, to 315,752 and those received directly in the Revenue department fell, by 10,347, to 64,698. The total number of applications for disposal including the previous year's pendency was 579,910, of which 195,991 were left pending at the close of the fasli as against 200,303 in the previous fasli. Of the number disposed of 5·03 per cent were rejected.

Pattas

307. Excluding Madras City, a total number of 4,861,789 pattas were held during the fasli—an increase of about 14 per cent on the figure for the quinquennium ending with fasli 1325. The increase was largest in those districts which were under resettlement. More than two-thirds of the pattadars in the Presidency held pattas of Rs. 10 or less : " dry " land preponderated in their holdings.

Loans and advances

308. The advances made under the Land Improvement Loans Act and the Agriculturists' Loans Act increased from Rs. 14·56 lakhs to Rs. 16·28 lakhs. The increase was largest in Anantapur (Rs. 1·89 lakhs), where, as in Bellary, loans were granted on a large scale owing to famine. Of the sums repayable under these Acts during the year on account of principal, 72·4 per cent under the former Act and 63·1 per cent under the latter were collected as against 80·3 and 66·1 per cent, respectively, in the previous year. The aggregate amount of principal and interest repayable under both the Acts during the year was Rs. 17·85 lakhs against Rs. 14·53 lakhs in the previous year, of which about 18·9 per cent was collected without resort to coercion and about 43·7 per cent after issue of demand notices, the corresponding percentages in the previous year being 27·8 and 42·8, respectively. The balance outstanding at the end of the year was Rs. 5·77 lakhs as against Rs. 4·05 lakhs in the previous year.

SURVEYS (1921–22)

[*Report on the administration of the Survey Department for the year 1921–22 ; G.O. No. 1730, Revenue, dated the 23rd September 1922*]

Parties

309. As in the preceding year, eight Parties were at work. Parties Nos. III, IV, V, VI and VIII operated in ryotwari areas and Nos. I, II and VII principally in estates. No. III Party was employed in South Arcot and Tanjore and Nos. IV, V and VI in Tanjore and Trichinopoly. No. VIII Party continued its operations in the Wynaads. No. I Party was engaged in the resurvey of Kistna till July 1921, when, on account of the financial stringency, it was deflected to the survey of the Tirumalai

Devastanam villages in Chittoor district. No. II Party was engaged wholly on the survey of the Rāmnād Zamindari until January 1922, when, as the Raja represented that he could not bear the cost of maintaining a full party, the survey of the Kannivadi Zamindari in Madura district was assigned to it. No. VII Party was employed in the Sivaganga Zamindari of Rāmnād district throughout the year.

Operations

Ryotwari areas

310. The main work of the department was, as usual, the cadastral resurvey of ryotwari areas as a preliminary to resettlement. The total outturn under this head was 1,546 square miles against the revised forecast of 1,544 square miles and the original forecast of 1,766 square miles. The revision was due to the proposals for retrenchment and the consequent issue of notices of discharge to a large staff of temporary subordinates who constituted the bulk of the establishment. Many of them left service and the fear of discharge cramped the energy of the others. The resurvey of the Kodaikānal taluk in Madura district which was included in the year's programme was postponed, as the system and scope of the resurvey to be adopted is not yet settled. On the outbreak of the Māppilla rebellion, the surveyors pluckily remained at their posts. But the murder of two surveyors and two peons at Pandalur dislocated the work for a considerable time. In spite of this tragedy, the output of the work in the Nilgiri-Wynaad was 145 square miles, only 17 square miles below the forecast. Another important item of the work of the Department was the survey of estates, which was in progress during the year in the Tirumalai Devasthanam villages in the Tiruttani taluk of the Chittoor district, the Rāmnād and Sivaganga Zamindaries in the Rāmnād district and the Kannivadi Zamindari in the Madura district. During the year an area of 460 square miles, inclusive of 18 square miles in minor estates, was surveyed. More would have been done, but for the suspension of operations in Rāmnād, owing to the Raja's inability to finance them to the degree expected and the difficulties encountered in the survey of Sivaganga estate. In addition the survey of an area of 1·24 square miles in Chidambaram Municipality and of 21 Unions in six districts was carried out.

Estates

Town and unions

Central Office

311. The area of village maps printed during the year was 2,343 square miles, inclusive of 180 square miles of proprietary villages, and 28 square miles of Coorg. The arrears of printing at the end of the year, were 2,105 square miles (inclusive of 633 square miles outstanding in party offices) as against 1,949 square miles in the preceding year. Other maps printed during the year included taluk, estate, touring, district and union street survey maps. The value of general maps sold to the public during the year was Rs. 3,133-2-0 against Rs. 4,010-10-9 during the previous year. The staff of the ferro-prussiate tracing and printing section was gradually reduced, with a view to its eventual abolition. The cost of the work done for the Survey of India was Rs. 5,847.

Finance

312. The gross expenditure was Rs. 19·78 lakhs as against Rs. 16·80 lakhs in the preceding year ; the increase was due partly to the reorganization of the gazetted and the subordinate staff and partly to the employment of two extra parties throughout the year. Of the total expenditure a sum of Rs. 13·10 lakhs is chargeable to Government and Rs. 6·68 lakhs to proprietary estates, municipalities and unions, the corresponding figures for the previous year being Rs. 12·09 lakhs and Rs. 4·71 lakhs respectively.

SETTLEMENTS (1921-22)

[*Report on the administration of the Settlement Department for the year 1921-22; G.O. No. 1730, Revenue, dated the 23rd September 1922*]

Parties

313. As in the previous year, five parties were at work during the official year. Their distribution was :—Party No. I in the Tanjore district, Party No. II in the districts of South Arcot and North Arcot, Party No. III in the districts of Anantapur and Bellary, Party No. IV in Madura, Rāmnād and Trichinopoly and Party No. V in Ganjām, Vizagapatam and Kistna. The Special Settlement Officer in charge of the operations in the Nilgiri and Malabar-Wynaads continued to work until October 1921, when he handed over charge to the Collector of the Nilgiris ; his office was closed in January 1922.

Operations

314. In Ganjām, the village settlement register of the Pondakhol mutta was prepared and sent to the Press. A final record-of-rights was published for eight villages in the Mandasa and Surangi estates. Work in connexion with the settlement of rents was in progress in several estate villages, and preliminary rent-rolls were published. The village settlement registers of all the three Government taluks of the Vizagapatam district were checked and sent to the Press, and the report on the introduction of resettlement rates was submitted to Government. Inam resettlement work was almost completed, and progress was made in the revision of assessment in whole inam villages for land-cess purposes. In Kistna, the final record-of-rights for Peddamamidipalle was published, and in three other villages the preliminary record-of-rights was published and objections were heard. The Special Revenue Inspectors in Bellary dealt with 148 ryotwari and 18 shrotriyam villages, and the Special Deputy Tahsildars completed their check in 183 ryotwari and 23 shrotriyam villages of the Bellary, Hadagalli, Siruguppa, Hospet and Rayadrug taluks. The collection of statistics for the scheme report on the red-soil taluks of the district was completed. In Anantapur, adangal revision and subdivision survey were finished in the Gooty and Tadpatri taluks. In the Bellary and Anantapur black-soil taluks the process of introduction will be simplified by the preparation and the issue in advance of fair adangals, leaving only the revised rates and assessments to be filled in later. The preparation of village settlement registers in the Tiruvannāmalai taluk of North Arcot was completed, and the report on the introductiom of the resettlement rates was prepared. In South Arcot, rough pattas were issued and objections were heard in 521 villages, the fair accounts of 568 villages were handed over to the Revenue Department and the settlement registers of 111 villages were sent to the Press. During the year the revision of adangals and the handing over of the records to the Survey Department was completed in Tanjore. Final orders were passed in respect of 292 villages by gazetted officers, rough pattas were issued for 225 villages, objections were heard in 165 villages and the fair accounts of 238 villages were handed over to the Revenue Department. A final record-of-rights was published for two "mukhasa" villages. In the Musiri taluk of the Trichinopoly district, adangal revision was completed in 38 villages. The Special Settlement Officer continued his compilation of statistics for his scheme report. Rough pattas were issued for 63 villages, objections were heard in 57 villages and the fair accounts of 27 villages were handed over to the Revenue Department. In Madura a report on the financial results of the block classification of whole inam villages was submitted to the Board of Revenue. Materials for the scheme report on the Kodaikānal taluk were collected. In Rāmnād, progress was made with the preparation of record-of-rights of estate villages, and the initial settlement of alienated and resumed inams was completed.

Ganjām

Vizagapatam

Kistna

Bellary

Anantapur

North Arcot

South Arcot

Tanjore

Trichinopoly

Madura

Rāmnād

Registers

315. The scrutiny of village registers in the office of the Board of Revenue was abandoned as from the 1st of May 1921, and thereafter the

registers were sent to the Press direct from the Settlement Parties. The registers of 1,006 villages were sent to the Press from the Board's office, and the printed registers of 483 villages were despatched to Collectors.

Finance

316. The total expenditure for the year was Rs. 7·88 lakhs as against Rs. 7·96 lakhs in 1920–21. The cost of the controlling office was Rs. 1·55 lakhs compared with Rs. 1·57 lakhs in the previous year; the cost of printing and binding settlement registers rose from Rs. 0·25 lakh to Rs. 0·34 lakh; and the expenditure on the parties fell from Rs. 6·13 lakhs to Rs. 5·99 lakhs.

LAND RECORDS (1921–22)

[*Administration Report of the Land Records Department for the official year 1921–1922*]

General

317. Following the deletion of the budget provision for the Land Records Department by the Legislative Council, the department was abolished from the 1st of May 1921. The entire staff was disbanded, the Land Records Revenue Inspectors being merged in the cadre of firka Revenue Inspectors in each district. The size of firkas was reduced to enable the Revenue Inspectors to cope with the maintenance work which was added to their normal duties, and Tahsildars and Divisional Officers took over the supervision of this branch of revenue work in their jurisdiction.

Maintenance

318. With the exception of a few tracts which were under resurvey or resettlement, maintenance was running on regular lines throughout the Presidency. The maintenance of registry had been one of the main activities of the late department, which had aimed at reducing the volume of corrections which devolved upon the Settlement parties prior to resettlement: this branch of maintenance was adversely affected by the removal of an efficient check. The check measurement of sub-divisions made more satisfactory progress. But the same cannot be said of stone maintenance, in which the outturn of work fell by 36 per cent from last year's figure. The general condition of great trigonometrical stations and of bench marks was good, and those which were in need of repair were properly attended to.

Training

319. Prior to the abolition of the department, the training of Assistant and Deputy Collectors had been in the hands of Assistant Directors under the supervision of the Director of Land Records. On its abolition, the training of these officers was entrusted to Settlement officers, who supervised the conduct of the schools by those of their assistants who had previously served as Land Records Tahsildars. Similarly, the training of revenue subordinates was undertaken by Tahsildars who had undergone training in the duties of a Land Records Tahsildar. Competent Revenue Inspectors were appointed to train karnams. On these lines, ten Assistant Collectors and one Deputy Collector were trained during the year, 276 subordinates attended the twelve joint schools and karnams were trained in all the districts but three.

Maintenance in towns and unions

320. In previous years the Land Record Tahsildars had exercised supervision over maintenance in towns and unions. With the passing of this control, technical supervision became impossible. The question of transferring the control of town and union surveyors entirely to the municipalities and local bodies concerned is receiving the attention of Government.

WASTE LANDS

(FASLI 1331—1ST JULY 1921 TO 30TH JUNE 1922)

[*Season and Crop Report for the agricultural year 1921–22*]

321. The total area of the Presidency was 89·690 million acres, of which a net extent of 33·012 million acres was under cultivation as against 33·073 million acres in the preceding fasli. The area classed as forest increased from 12·986 million acres to 13·055 million acres, while 21·412 million acres (or 0·415 million acres less than in the previous year) were not available for cultivation. Of the remainder, 10·032 million acres were fallow and 12·179 million acres formed culturable waste other than fallow, as against 9·879 million acres and 11·997 million acres, respectively, in the previous fasli.

GOVERNMENT ESTATES

322. There is nothing to record under this head for the Presidency.

WARDS' ESTATES

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Report on the administration of the estates under the Court of Wards in the Madras Presidency for fasli 1330 (1920–21)*]

Estates under management

323. Twenty-two estates were under the Court's superintendence at the end of fasli 1329. The estate of the Jeypore Kumārikā in Vizagapatam was taken over on the 8th July 1920, as she was a minor, and the Dēvarakōta estate in Kistna came under the Court's management on the 25th February 1921, as the proprietor was declared incapable of managing it. Thimmājiammā's estate in North Arcot and the Kallikōta-Atagāda estate in Ganjām were handed over to their proprietors on the 7th July 1920 and the 14th January 1921, respectively, as they had attained their majority. The Dēvarakōta estate was, on the death of the incapacitated proprietor, restored on the 12th June 1921 to his son, who is a major. The total number of estates under the Court's management at the end of fasli 1330 was twenty-one, the most important being Sivaganga which has an income of over Rs. 15 lakhs. Of the estates that were handed over Thimmājiammā's estate was under the Court's superintendence for twelve years and eight months. During this period, the revenue demand of the estate rose from Rs. 6,422 to Rs. 7,039 ; debts due to the estate, amounting to Rs. 7,739, were recovered ; debts due by the estate, amounting to Rs. 3,376, were liquidated ; irrigation works were improved at a cost of Rs. 1,370, and Rs. 4,786 were expended on improvements to roads and on forest works, etc. On the date of rendition, the estate was free from debt and had to its credit a balance of Rs. 64,441 in cash and securities. The Kallikōta-Atagāda estate was under the Court's management for eleven years and four months and during this period the revenue demand increased from Rs. 5,52,238 to Rs. 7,32,456 ; debts amounting to Rs. 75,565 were recovered ; ordinary debts amounting to Rs. 4,657 were discharged ; an aggregate payment of Rs. 21,71,672 was made towards the two Sterling Debenture Loans for £135,000 and £77,500, raised by the late Raja, leaving £87,900 and £77,500, respectively, outstanding ; Rs. 3,62,433 were spent on irrigation works, and Rs. 1,15,326 on the construction of roads and buildings. The estate was surveyed and

Estates handed over

the forests in it were worked according to the prescribed rules. Towards the close of the Court's regime, the Nirasapalli irrigation project in Atagāda, which had long been under investigation, was taken up as being the best investment that could be found for the surplus funds; and the work was in progress when the estate was restored. It is expected that the work, when completed, will provide permanent security against the failure of the north-east monsoon, thus bringing prosperity to the ryots and increasing the income of the estate. The Dēvarakōta estate was under the Court's superintendence for a period of three months and eighteen days only and no improvements could therefore be effected.

Finance

Demand, collection and balance

324. Leaving out of account the estates handed over, the gross current demand of the estates amounted to Rs. 30·53 lakhs. Excluding remissions which amounted to Rs. 0·12 lakh, the net demand was Rs. 30·41 lakhs. There were considerable decreases in Sivaganga (Rs. 3·42 lakhs), Zamorin's estate (Rs. 0·94 lakh) and Talaivankōttai (Rs. 0·20 lakh). Of the total current demand of Rs. 30·41 lakhs, Rs. 23·14 lakhs were collected and Rs. 0·31 lakh written off during the fasli, leaving a balance of Rs. 6·96 lakhs at its close. Excluding subsequent collections, remissions and amounts which, after the close of the year, were recommended by Collectors to be written off, the net recoverable balance amounted to Rs. 6·03 lakhs, or 19·8 per cent of the demand against 14·2 per cent in the previous year. In Māmbārai and Kadambūr, there was no outstanding balance; in two estates, the balance was less than 5 per cent of the demand; in two, it was between 5 and 10 per cent; and in eight, between 10 and 25 per cent. The balance exceeded 25 per cent in the remaining six estates. The total arrear demand at the beginning of the fasli amounted to Rs. 10·43 lakhs, of which Rs. 5·43 lakhs were outstanding at its close. In six estates, the balance was less than Rs. 1,000; in five, it ranged between Rs. 1,000 and Rs. 5,000; and in five others, between Rs. 5,000 and Rs. 10,000. The outstanding arrears exceeded Rs. 10,000 in the remaining four estates. The aggregate cash balance of the estates (excluding Kallikōta-Atagāda and Thimmājiammā's estates) at the beginning of the fasli was Rs. 8·90 lakhs. The total cash receipts during the year amounted to Rs. 30·67 lakhs. The total assets for the fasli in cash were therefore Rs. 39·57 lakhs. The total expenditure during the fasli amounted to Rs. 33·31 lakhs, leaving a cash balance of Rs. 6·26 lakhs at its close. Including Government Promissory Notes and other securities of the aggregate face-value of Rs. 8·06 lakhs, held on behalf of some of the estates and the estimated value of grain on hand at the end of the year, viz., Rs. 3·88 lakhs, the total closing balance to the credit of the estates was Rs. 18·20 lakhs. The ordinary cash receipts and charges of the year amounted to Rs. 26·91 and Rs. 23·78 lakhs, respectively, against Rs. 37·76 and Rs. 24·44 lakhs in the preceding year.

Surplus balances

Surplus balances exceeding a lakh of rupees at the end of the year were held on behalf of Sāptūr, Sivaganga, Ūttumalai and Ūrkkādu estates. A large portion of the surplus in all these estates has been invested in Government and other securities. The rest of the surplus in Sāptūr has been reserved for the purchase of lands and for the repair of irrigation works and buildings. The entire surplus in Sivaganga is required for the survey of the estate and for expenditure on marāmat works in accordance with an extensive programme approved by the Court. The cash balance in Ūttumalai is reserved for current expenditure and for payment in connexion with the Virānam tank repairs. The question of purchasing a bungalow at Courtallam for the Ūrkkādu estate was under correspondence, but the negotiations fell through, as the owner would not come to terms. It was then proposed to utilize the surplus on the construction at Ūrkkādu of a new residence for the ward. There is no scope in this estate for spending any large amount on the improvement of irrigation works.

Agricultural improvements

Two home-farms, each comprising about 40 to 50 acres of land were opened during the year, in

the Zamorin's estate and the scheme for a combined dairy and agricultural farm in the Guruvāyūr Dêvaswam estate was completed. Arrangements were made in the Zamorin's estate for the construction of combined quarters and a storeroom and for sinking a well, for one of the farms; and these works were completed at a cost of Rs. 2,200. With the advice and co-operation of the Deputy Director of Agriculture, it is proposed to introduce up-to-date methods of agriculture in the two experimental farms, which will serve as a practical example to the estate ryots. The coconut and other plantations started in the estate during fasli 1329 continued to be maintained, although the small paddy home-farm worked in the two previous faslis had to be abandoned and the land leased out. The average percentage of establishment charges and Government commission to normal receipts for all the estates was 24·3 against 15·7 in the previous year. Taking the estates individually, the percentage exceeded the prescribed maximum of 12 in all the estates except two. Circumstances vary greatly in different estates, and experience has shown, that the 12 per cent limit is an anachronism, especially in the case of the smaller estates. In eight estates, the percentage was noticeably high, viz., Pedda Mêrangi (32·6), Madugula (38·6), Berikai (34·2), Bāgalūr (32·7), Madukkūr (48·5), Kadavūr (26·4), Sāptūr (25·9) and Sivagangā (27·0). These high percentages were chiefly due to a fall in normal receipts owing to the unfavourable character of the season, coupled with an increase in establishment charges consequent on the payment of enhanced pay and travelling allowance to estate subordinates.

Establishment charges

325. The Court paid special attention to the improvement and repair of existing irrigation works and the construction of new works, wherever possible, in all the estates under its superintendence. Including the Dêvastānam and Chattram sections in estates in which these sections have separate endowments, the total allotment for marāmat works in all the estates was Rs. 6·61 lakhs, of which Rs. 5·90 lakhs, or 89·2 per cent, were actually expended during the year against Rs. 4·92 lakhs or 81·7 per cent, in the previous year. The aggregate value of work done but not paid for within the year amounted to Rs. 0·45 lakh. The total value of the works executed during the year was therefore Rs. 6·35 lakhs, or 96·1 per cent of the allotment against Rs. 5·28 lakhs or 87·7 per cent in the previous year. Of the total expenditure, Rs. 3·26 lakhs were spent on irrigation works, Rs. 1·35 lakhs on buildings, Rs. 0·48 lakh on roads and other works and Rs. 0·81 lakh on establishment and contingencies. The aggregate outlay during the year on marāmat works was 20·6 per cent of the total ordinary charges of the year (including those of the Dêvastānam and Chattram sections) against 16·98 per cent in the previous year.

Works

326. The aggregate amount of debts due to the several estates at the beginning of the year was Rs. 1·50 lakhs, of which Rs. 0·29 lakh was collected and Rs. 0·02 lakh written off, leaving a balance of Rs. 1·19 lakhs appertaining to fourteen estates. The outstanding balance was large in Kūdapalli (Rs. 0·12 lakh), Sivagangā (Rs. 0·70 lakh), and Ūrkkādu (Rs. 0·10 lakh). Although the bulk of the balance in Kūdapalli is covered by suits and execution proceedings and, in other cases, notices threatening institution of suits have been issued to the debtors, the greater portion of the amount due is reported to be irrecoverable. Including debts contracted during the year (Rs. 0·75 lakh), debts newly brought to account (Rs. 0·21 lakh) and the interest and costs which accrued during the year (Rs. 0·55 lakh), the total liabilities amounted to Rs. 12·65 lakhs of which Rs. 1·76 lakhs were repaid and Rs. 0·01 lakh struck off, leaving a balance of Rs. 10·88 lakhs at the end of the year, payable by fifteen estates. The outstanding debts exceeded Rs. 50,000 in six estates, viz., Ārni (3·79 lakhs), Zamorin's estate (0·72 lakh), Madukkūr (1·45 lakhs), Kadavūr (1·16 lakhs), Kūdapalli (1·50 lakhs) and Mannārkōttai (0·52 lakh). The only estates in which the provisions of section 45 of the Madras Court of Wards Act continued to be in force during the year were Kadavūr and Ārni. Debts amounting to Rs. 4,286 were paid off in the

Debts

Debts due to estates

Debts due by the estates

Encumbered estates

Kadavūr estate, leaving a balance of Rs. 1,16,277 at the close of the year. In the Ārni estate, a debt of Rs. 16,800 was repaid and Rs. 887 was struck off, leaving a balance of Rs. 3,79,156. As the Court has decided to carry out an extensive programme of irrigation works in the latter estate and is utilizing the bulk of the available surplus income for the purpose, it was not possible to liquidate any considerable portion of the outstanding liabilities.

Education

327. Owing to the closing of Newington the wards under the Court were sent to their respective districts and were either placed under suitable guardian-tutors or allowed to prosecute their studies in public schools and colleges with the help of private tutors, where necessary.

Religious and charitable institutions attached to the estates

328. Separate accounts were maintained for the religious and charitable institutions attached to Madukkūr, Kadavūr, Kūdapalli, Sāptūr, Sivagangā, Ūttumalai, Ūrkkādu and Talaivankōttai and for the Guruvāyūr Dêvaswam estate. The administration of these institutions was satisfactory and their financial condition was generally sound. In Sivagangā, the amalgamation of the Ayan, Dêvastānam and Chattram sections in all respects except in the matter of accounts was in force throughout the fasli, and the system has worked well. In the Zamorin's estate, a scheme for the separation of the Ayan and Dêvaswam sections was sanctioned during the fasli tentatively for two years with effect from fasli 1331.

Miscellaneous

329. The Second-grade College maintained by the Zamorin's estate worked satisfactorily during the fasli and maintained its usual tone and discipline. The results of the Secondary School-leaving Certificate and Intermediate Examinations were very satisfactory. The strength of the institution increased during the year but the financial condition of the College did not improve and the Zamorin's estate had to contribute half as much again as in fasli 1329 to meet the increased cost of the staff, due to the revision of salaries sanctioned by the Court. The College laboratory and library, buildings and furniture were considerably improved during the year. The hostel attached to the College continued to work satisfactorily and the demand for an extension of the buildings has increased. The proposal to raise the College to the First-grade had to be postponed until more public support was forthcoming, as the financial burden would be greater than the Zamorin's estate could at present undertake. The Raja's High School and the Alice Millar Girls' School at Sivagangā continued to work satisfactorily. The financial condition of the former was satisfactory, while the latter was far from self-supporting owing to the apathy of the Sivagangā public in the education of their daughters. Suggestions to improve the Girls' School are being considered. The residential Vedic School known as the Othenmar Madham was maintained at the expense of the Zamorin's estate. The estate's contribution of Rs. 20 per mensem for the upkeep of the Sanskrit College at Pattāmbi was continued during the year. The Elementary School at Ūrkkādu supported by the estate worked satisfactorily. The marriages of the Sāptūr and Kadambūr wards and the Ūrkkādu ward's sister were celebrated during the fasli. The Veterinary Hospital in Ūttumalai opened in fasli 1329 continued to be popular. The construction of a well and compound wall for the Hospital and quarters for the Veterinary Assistant was sanctioned and they are nearing completion. Since the death of the Pedda Mêrângi ward in May 1920 and of the Zamindarni of Ūttumalai in July 1921, the Court has been managing the estates under section 61 of the Court of Wards Act and is maintaining an attitude of neutrality in the suits which have been filed regarding succession. A Council designated "Sivagangā Samastanam Council" was inaugurated during the fasli, with the Zamindar as the ex-officio President, the Estate Engineer as the Vice-President and the Personal Assistant to the Estate Collector as the Secretary. All officers of the Zamindari of and above the rank of Tahsildars, the Assistant Tahsildar, Kaliarkoil, and the Headmaster of the Raja's High School are the ex-officio members of the Council. The Council is intended to

discuss matters relating to revenue administration, education, irrigation, agriculture, etc. It is for the Zamindari what the Revenue Officers' Conferences and the District Board's meetings are to a district. The important officers and the prominent ryots of the estate take part in the deliberations of the Council. On the 5th October 1921 the Zamindar of Sivagangā ascended the Gādi. The Survey of the Sivagangā estate was in progress during the year. The cost of the operations so far carried out has been exceeded by the value of the encroachment discovered.

REVENUE AND RENT-PAYING CLASSES

(FASLI 1330—1ST JULY 1920 TO 30TH JUNE 1921)

[*Report on the settlement of Land Revenue for fasli 1330*]

Revenue-paying classes

330. The principal revenue-paying classes of the Presidency are zamindars, whole inamdars, minor inamdars and ryotwari pattadars. The last class predominated largely and contributed about 77·7 per cent of the land revenue. There was an increase of about 4·2 per cent in the total number of ryotwari holdings as compared with that of fasli 1329.

Rent-paying classes

331. Tenants in zamindari and whole inam villages constitute the rent-paying classes. Subletting was as usual especially common in the Madakasīra taluk in Anantapur, where much of the land is owned by Brahmans. There was apparently some decrease of subletting in Nellore and parts of Vizagapatam and Bellary.

CHAPTER III

PROTECTION

LEGISLATING AUTHORITY

The Legislative Council

24 & 25 Vic., c. 67

332. When first constituted by the Indian Councils Act of 1861, the Legislative Council of Madras consisted of the ordinary members of the Governor's Executive Council and a number of additional members besides the Advocate-General, of whom not less than half were to be non-officials nominated by the Governor. The number of nominated members, exclusive of the Advocate-General, was fixed at not less than four and not more than eight and thus the strength of the whole Council was so small that the Council could be described as "a mere committee for the purpose of making laws, a committee by means of which the executive Government obtained advice and assistance in their legislation and the public derived the advantage of full publicity at every stage of the law-making process." The Council could not inquire into grievances, call for information or examine the conduct of the executive; and even its legislative function consisted merely of registering the orders of the Government in a manner which ensured publicity and discussion. By the Councils Act of 1892 the minimum and maximum numbers of additional members, exclusive of the Advocate-General, were raised to 8 and 20, respectively. The Governor had power to nominate all of them, but he was to do so subject to certain regulations made by the Governor-General in Council with the approval of the Secretary of State in Council, and under these regulations seven non-official members were to be nominated on the recommendations of various local, commercial and learned bodies. Technically the function of the nominating bodies was to be that of mere recommendation, but, in practice, the nomination was always accepted and thus in course of time the system of election came to be firmly established. The Council was to contain an official majority, but it had the right of asking questions and of discussing though not voting upon the budget. The next stage in the development of the Council was marked by the Indian Councils Act, 1909 (The "Minto-Morley Reforms"), the salient features of which were (1) a great expansion in the strength of the Council—the Council consisted of 42 additional members, besides the ordinary members of the Governor's Council; (2) the legal recognition of the elective principle—21 members out of the 42 additional members were elected; (3) the abandonment of the official majority, though a combination of officials and nominated non-officials could obtain a majority over the elected members; (4) the grant of rights (*a*) to move resolutions on the budget and divide upon them, (*b*) to move resolutions upon matters of general public importance and (*c*) to ask supplementary questions.

55 & 56 Vic., c. 14

9 Edw. 7, c. 4

9 & 10 Geo. 5, c. 101

333. The Government of India Act of 1919 made still further changes in the composition and functions of the Local Legislative Council. The Council is no longer the Governor's Executive Council supplemented by a number of additional members for the purpose of legislation, but is a separate body consisting of members nominated or elected as provided by the Act and having an independent existence of its own. The members of the Executive Council are ex-officio members of the Legislature but the Council contains in addition 98 elected and 25 nominated members.

Rule 3, Madras Electoral Rules

The Ministers are appointed by the Governor but must not be officials and must be at the time of appointment or become within six months elected members of the Council. Of the nominated members not more than 19 may be officials; five are nominated to represent backward communities which are unlikely in any other way to secure representation, and one to represent the inhabitants of the Agency Division, which has been declared a backward tract. The Governor is not a member of the Legislative Council but has the right to address the Council and may for that purpose require the attendance of the members. Until the expiration of a period of four years from the first meeting of the Council, as constituted under the Act, the President is to be a person appointed by the Governor, but thereafter he will be a person elected by the Council from among the members and approved by the Governor. The Deputy President is a member of the Council elected by the Council and approved by the Governor. Of the ninety-eight elected members thirteen represent Muhammadan and five Indian Christian constituencies; the Europeans and Anglo-Indians of the Presidency each have one representative, as also the Madras University and the Planting community; commercial bodies have five and the larger landholders six; and the remaining sixty-five are elected by general non-Muhammadan constituencies. Twenty-eight of these sixty-five seats are reserved for non-Brāhmans, though at the elections held at the end of 1920 considerably more than this number were actually secured by non-Brāhmans. For the rural constituencies the general qualification for a vote is the payment of Rs. 10 per annum in rent or revenue; for urban constituencies the payment of taxes at the minimum rate, or, in Madras, the occupation of a house of an annual value of not less than Rs. 60; irrespective of these qualifications, retired, pensioned or discharged officers, non-commissioned officers and soldiers of His Majesty's regular force are entitled to vote. Generally speaking, a voter must be a British subject, not of unsound mind and not under 21 years of age; a sex disqualification which formed part of the original rules has since been removed. The total number of voters on the first electoral rolls was over a million and a quarter; and though this is a small proportion of the population of the Presidency, the enfranchisement of this number must be recognized as a great advance on the former system of indirect election. The number that actually went to the polls was 303,558.

Government of India Act, Section 52

Madras Electoral Rules, Rule 3

Government of India Act, Section 72-A (1)

Section 72-C (1)

Section 72-C (2)

Madras Electoral Rules, Rule 7

334. The general qualifications for election to the Council run on the same lines as the qualifications for the franchise, with certain additions. The age minimum is raised to 25; conviction for a serious offence in a criminal court becomes a disqualification; and no person who is already a member of any legislative body constituted under the Act is eligible for election. Government servants are debarred from election, and the acceptance of any Crown office must be followed by resignation, except in the case of Ministers. The rules provide for the settlement of election disputes by a court of three commissioners of high judicial standing. New members are required to take an oath of allegiance to the Crown. On any failure to take this oath, the seat is declared vacant by the Governor, who may also declare vacant the seat of any member who is absent from India for a long period.

Rule 5

Government of India Act, 1919, Section 80-B

Rule 34 (2) of the Madras Electoral Rules

Powers of the Council

335. Generally speaking, the Legislative Council has power, subject to the provisions of the Act, to make laws for the peace and good government of the province; but no legislation which affects any Act of Parliament is permissible. Considerable latitude is now allowed in respect of legislation for the imposition of taxation. Previous to the passing of the Act, the consent of the Governor-General had to be obtained for all such legislation. This restriction has been removed in the case of certain scheduled taxes such as those on non-agricultural land and luxuries. Under the concurrent powers of legislation now granted to the Central and Provincial Legislatures, it is open to the Provincial Council to amend, in its application to their own province, certain forms of legislation passed by the Central Legislature. But it is obvious that, to ensure uniformity in India and to safeguard the observance of the general

Government of India Act, 1919 Section 80-A (1)

Section 80-A (4)

policy of the country, a large measure of control over matters affecting broader issues must be retained in the hands of the Central Legislature. This precaution is ensured by the scheduled limitation of the powers of the local Council; thus the following forms of legislation are not within the province of the Provincial Council :—

Government of India Act, Section 80-A (3)

(*a*) Laws imposing new taxation, except such laws as are permitted by schedule (vide supra);

(*b*) Laws affecting the public debt of India or customs or taxes imposed by the authority of the Central Government;

(*c*) Laws affecting the Imperial forces or relations with foreign Princes or States;

(*d*) Laws regulating central subjects;

(*e*) Laws affecting provincial subjects which are declared to be subject to the legislation of the Central Government, or affecting the powers of the Governor-General, or such laws as aim at repealing or altering legislation which, according to the rules provided under the Act, can only be altered or repealed with previous sanction.

Powers of the Governor

336. In pre-Reform days it was generally possible for the Government to pass any measure which it considered necessary and to prevent the passage of any measure which it regarded as injurious or unsound. With a large non-official majority these powers no longer remain and other safeguards for use in emergencies have had to be provided by the Government of India Act and the rules framed thereunder. Where any Bill has been introduced or is proposed to be introduced, or any amendment to a Bill is moved or proposed to be moved, the Governor may certify that the Bill or any clause of it or the amendment affects the safety or tranquillity of the Province or any part of it, or of another province and may direct that no further proceedings shall be taken in connection with it. Similarly, where the Council has refused leave to introduce, or has failed to pass in a form recommended by the Governor any Bill relating to a reserved subject, the Governor may certify that the passage of the Bill is essential for the discharge of his responsibility for the subject, and thereupon the Bill is deemed to have been passed. A measure so passed must ordinarily be reserved for the signification of His Majesty's pleasure, though where in the opinion of the Governor-General a state of emergency justifies such action, he may immediately signify his assent and the Act will come into force subject to subsequent disallowance by His Majesty in Council; and Acts passed under these provisions must be laid before both Houses of Parliament. It is further open to the Governor or the Governor-General, when a Bill has been passed by the Legislative Council, to withhold his assent; or the Governor may, instead of declaring that he assents to, or withholds his assent from, the Bill, return the Bill to the Council for reconsideration in whole or in part, together with any amendments which he may recommend; or, in certain cases for which provision is made in the rules, he may, or must, reserve the Bill for the consideration of the Governor-General. A Bill so reserved, if it does not receive the assent of the Governor-General within six months, lapses unless within that period the Governor has returned, or notified his intention to return, it to the Council for further consideration. No use has hitherto been made of these emergency powers.

Section 72-D (4)

Section 72-E (1)

Section 72-E (2)

Section 72-E (3)

Section 81-A (1)

Section 81-A (2)

Financial procedure

337. The annual budget of the province is presented to the Council yearly on a day appointed by the Governor. There are two stages in the passage of the financial programme—a general discussion and the voting of demands for grants. But the following heads of expenditure are not subject to submission to the vote of the Council :—

Section 72-D (3)

(*a*) contributions payable by the Local Government to the Governor-General in Council;

(*b*) interest and sinking fund charges on loans;

(*c*) expenditure the amount of which is prescribed by law;

(*d*) salaries or pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council; and

(*e*) salaries of the High Court Judges and of the Advocate-General.

338. Normally, a separate demand is made in respect of the grant required for each department, but the Finance Member may unite the grants of two or more departments in one demand. On the appointed day, a motion for the granting of each demand is made by the responsible Member of Council or Minister. The members of the Legislative Council are then free to bring forward motions for the omission or reduction of a grant ; but it is not open to them to move for the increase of any grant or for the alteration of its destination. There is statutory provision for excess grants and for supplementary grants. As in the case of ordinary legislation, the Governor has power to carry through demands in respect of reserved subjects when he is of opinion that such expenditure is essential for the proper discharge of his responsibilities, and, in the case of all subjects, to enforce such expenditure as he considers essential for the safety of his province.

Resolutions

339. Members have a right to move resolutions on matters of general public importance ; fifteen days' notice must be given. Every resolution must be in the form of a recommendation to the Government, and no resolution may be moved on matters affecting relations with foreign States, relations with, or the administration of, Princes or Chiefs under the suzerainty of His Majesty, or on any matter which is *sub judice*. The Governor may disallow any resolution, before it is placed on the agenda, on the ground that the public interests would suffer thereby or that it relates to a matter which is not primarily the concern of the Local Government. The standing orders of the Council forbid the moving of a resolution which covers the same ground as a previous resolution of the same session.

Questions

340. On giving seven days' notice, a member may put a question on any matter of public concern, with the object of obtaining information from the member of the Government within whose special cognizance the subject-matter lies. The limitations on resolutions mentioned above apply equally to questions, and questions regarding controversies with higher authorities and the answers thereto are confined to matters and statements of fact. Any member who is dissatisfied with the answer given to his own or another member's question may follow up the question with a supplementary question.

Motions for adjournment

341. It is open to any member to move for the adjournment of the business of the Council for the purpose of the discussion of a definite matter of urgent public importance. But the Governor may disallow such a motion on any of the grounds mentioned in the case of resolutions.

COURSE OF LEGISLATION (1921-22)

Changes in the Council

342. During the year four bye-elections were held in the Presidency. Of these, one was caused by the finding of the Court of Election Commissioners that the election held in a certain non-Muhammadan rural constituency in 1920 was void ; one member died during the year ; one resigned on adopting the principles of non-co-operation ; and one resigned on being appointed to a post under the Crown. Six vacancies which occurred through the resignation of nominated members were at once filled up.

Legislation

343. Of the two Bills pending at the close of the preceding year, the Bill to amend the Madras Cattle Diseases Act (Act II of 1866) was passed into law during the year, and the Bill to amend the Law regulating the settlement of boundary disputes and the survey of land was still under the consideration of the select committee at the end of the year. Twelve new Bills were introduced during the year, of which eleven became law : the twelfth, the Prince of Arcot Endowment Bill, was referred to a select committee. The interests of the many Madras tenants who had

erected buildings on rented land and who were unprotected against eviction, were safeguarded by the passing of the City Tenants Protection Act, which gave them the option of obtaining compensation on eviction or of buying the land on payment of the market value. The provincial revenues are expected to increase by the passing of Court Fees Amendment Act and the Stamp Amendment Act. In the beginning of 1922 a crisis arose in the Guntūr district through the refusal of the ryots to pay their taxes; the procedure laid down in the original Revenue Recovery Act was found to be too lengthy to ease the situation immediately, and the Revenue Recovery (Temporary Amendment) Act was passed which permitted the shortening of that procedure; the provisions of the Act are to be in force until the end of June 1923. The Act to amend the Proprietary Estates Village Service Act and the Hereditary Village Offices Act, which is to be in force until the end of the year 1923, is another measure intended to meet the same emergency. The other enactments introduced minor alterations in the Madras City Municipal Act, the Madras District Municipalities Act and the Madras Local Boards Act.

344. Two motions to introduce Government Bills were rejected by the Council. Of these, one was to amend the Proprietary Estates Village Service Act of 1894; the other proposed to provide for the levy of a cess in ryotwari villages to meet the increased remuneration of village officers.

345. No Bills were sent up to the Government of India for introduction in the Indian Legislature.

346. Apart from the actual passing of legal enactments, the outstanding feature of the Council's activities was the Budget debate. The Council sat for nine days in March to consider the demands of the Local Government. The speeches of the non-official members were characterized right through by a desire to cut down yet further the reduced figures proposed by the Government. Travelling and other allowances were particularly the subject of strenuous debate, and the operations of the Survey and Settlement parties were called in question. It is a significant fact that the demands under Education, both European and non-European, were passed without reduction; nor did the grants concerned with the internal development of the resources of the Presidency, such as industries and irrigation, meet with any serious opposition. The general wish of the Council, in a word, was the maximum of reduction in establishments, combined with the minimum of obstruction to the expansion of the Presidency that the financial crisis would allow.

POLICE (1921)

[*Report on the administration of the Police of the Madras Presidency for the year 1921; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Police*]

Administrative changes

347. The sanctioned strength of the permanent force at the end of the year was 29,295. Owing to the heavy volume of work in the Madura and Coimbatore districts, two additional subdivisions were formed in Madura and one new subdivision in Coimbatore. As the post of Personal Assistant to the Madura District Superintendent of Police was abolished, the net increase in the Deputy Superintendents cadre was two. To suit the new conditions arising from the formation of the Agency division, the Narasapatam subdivision was abolished, and a new subdivision based on Vizianagram took the place of the Pārvatīpuram subdivision. In eleven districts the same Superintendents remained in charge throughout the year, and a shortage of officers left 14 subdivisions without a separate

officer in charge for periods ranging from over six months to a few days. The department as well as the Presidency lost an experienced and trusted officer by the death of Mr. P. B. Thomas, C.I.E. (for two years Inspector-General of the Force) in June 1921. The Māppilla revolt took its toll of the younger officers ; Mr. Rowley and Mr. Lancaster, Assistant Superintendents of Police, both men who knew no fear, were killed in action. Three Imperial officers retired, and among the Provincial Service officers one resigned and two retired. The late Mr. Thomas was in charge of the department until 10th June 1921, when Mr. F. Armitage took charge. Casualties

348. To meet the pressing call for improved pay, the 15 per cent vacancy reserve of the Taluk Police was abolished, thus releasing funds to improve the conditions of service. This improvement had a marked effect in reducing departmental offences and in checking the number of resignations and desertions ; the former fell from 31·4 to 24·9, the lowest figure for 34 years. The number of dismissals fell from 279 to 238, and the number of black marks fell by 5 per cent. In criminal Courts 126 officers were convicted as against 179 in last year, 69 being for offences committed in an official capacity. In Malabar, seven men of the lower ranks were brought to trial for desertion to the rebel banners. The C.I.E. was awarded to the late Mr. Thomas, seven officers received the King's Police Medal, and the titles of Diwan Bahadur, Khan Bahadur, Rao Sahib and Khan Sahib were conferred upon eight officers in all. The amount of monetary rewards to the Police rose slightly, while the figure under rewards to private persons remained practically stationary. **Recruitment and discipline** Rewards

349. The percentage of illiterate constables fell from 11·7 to 7·7. The Vellore Training School continued to promote the efficiency of officers of all grades. At the close of the year there were 3 probationary Inspectors, 16 Sub-Inspectors and 2 Sergeants under training, and during the year 7 Inspectors and 67 Sub-Inspectors passed out. As usual, probationary Assistant Superintendents of Police did a preliminary tour of training in the school. The very strenuous work done by the Shorthand Sub-Inspectors is evident from the figures of political meetings attended—1,400 meetings and 25 conferences. The audiences naturally looked with no friendly eye on such attendances. As a result of the stoppage of recruitment, all the Recruits' schools were closed towards the end of the year. **Education** Shorthand

350. The cost of the Department for the year 1921-22 was Rs. 162 lakhs as against Rs. 153 lakhs last year. The increase was due to improved rates of pay and increased allowances, a phenomenon common to all Government departments during the year. **Cost**

351. In spite of the activities of the non-co-operators, who adroitly aimed at shaking the loyalty of the base of rural communal life—the village officers—reports as a whole show that these worthies are realizing more and more their duty to the Police. The rewards to village officers approximated to last year's figure. The duties of village officers are being impressed on them personally by District Magistrates and their subordinates, especially in connexion with surveillance of known depredators and immediate report of untoward events. The ghat talaiyaris more than paid their way by their work in forming convoys of travellers for mutual protection. **Village Police**

352. The past year was a period of unprecedented strain for the Reserve Police, but their efficiency remained unimpaired. The Malabar reserves stood a severe ordeal well, and the reserves drafted into Madras to cope with the mill-strikes showed great self-restraint under provocation. The various activities of the reserves, the Malabar special police and the district constabulary in connexion with the events of this dramatic year have already been outlined in the "General Summary." **Armed Reserves**

353. The jurisdiction of the two Superintendents of Railway Police remained unchanged. As usual, theft was the prevailing crime, the number of cases increasing from 2,307 to 2,521. Armed patrols have been **Railway Police**

supplied to prevent the growing number of running train thefts. There were several clumsy and fortunately unsuccessful attempts at derailment.

C.I.D. and control of criminals

354. The various political outbreaks threw a very heavy strain on the C.I.D., and the preparations for His Royal Highness the Prince of Wales' visit called for much unostentatious work. The Finger Print Bureau received 17,000 references regarding suspects, and 22 per cent of these inquiries resulted in identification. There are indications that the value of such evidence is receiving wider recognition in criminal Courts. The various criminal settlements, embracing a population of over 7,000 souls, showed a satisfactory record. One of the brightest pages in the history of reclamation is the work among the Madura Kallars, where, through the agency of panchayats, offenders have been brought to task, cottage industries have taken a firm hold, and education bids fair to be universal among the rising generation. During the year 5,654 persons were registered under the Criminal Tribes Act and good behaviour was frequently rewarded by exemption.

Crime

355. Crime and economic conditions, as usual, went hand-in-hand. A comparatively good year and a decrease in prices led to a fall from 59,000 to 56,000 in the total of cognizable crimes. Madras City, the Ceded Districts, and Kistna showed the largest number of cases. The cases of grave crime decreased from 42,800 to 39,300. Murders rose to the record figure of 984. Unlawful assemblies attended by crimes of varying degrees of gravity were in many cases due to Non-co-operation agitation. A rise of 25·9 per cent under dacoities is due to the abnormal conditions in Malabar. Cattle thefts decreased by 17·3 per cent, but the number is still large in the Tamil districts, and it will take many years before the villagers cease to accept as inevitable the exactions ("tuppukuli") of the Kallars and the thefts that follow resistance to their demands.

Prevention of crime

356. The political situation not unnaturally distracted attention to a certain extent from the detection of crime, which showed a stationary figure. Of the property lost in cases, 14·5 per cent was recovered, a decrease of 7 per cent. Kistna district showed the heaviest loss. In 8·6 per cent of the cases reported investigation was refused. In 8,342 cases in the mufassal the prosecution was conducted by the prosecuting staff: last year's figure was 7,412; and the percentage of successes rose from 65·7 to 69·3. Several District Magistrates finally adopted or gave a trial to the scheme of reserving fixed days for Police cases.

Prosecuting staff

Escapes

357. During the year 171 prisoners escaped from custody and 126 were recaptured. In 26 cases constables were convicted for negligence, and in 31 cases no blame was laid upon the Police. Eighty-seven constables were punished departmentally. At Gannavaram 25 prisoners made a successful dash for liberty, arming themselves with the police carbines and carrying off a large sum of money. Of the 14 men who got clear away, 11 were re-taken.

False cases

358. A further decrease occurred in the number of cases struck off as "maliciously and wilfully false." In 200 cases the complainants were prosecuted; and 38 per cent of these were convicted. Of the cases prosecuted by the Police 0·2 per cent were found to be false after trial.

Security proceedings

359. Of the 2,817 persons dealt with under the security sections of the Criminal Procedure Code, the percentage bound over was the highest for 22 years. In Kistna and Rāmnād an increased number of such proceedings resulted in a decrease in crime.

Madras City Police

360. The sanctioned strength at the close of the year was 1,638 and was well maintained, due probably to the improvement in pay. This improvement raised the total cost of the force from Rs. 8·72 lakhs to Rs. 10·65 lakhs. Departmental punishments fell from 48 to 24·5 per cent. The total number of true cases of cognizable crime was practically the same as in last year. The disturbances at the time of the mill riots accounted for 74 cases of rioting and 36 of arson. Three of the ten murders were due to the same cause. The convictions of receivers more

than doubled. Of the property lost in cases, 25 per cent was recovered. The disciplinary control of motor traffic resulted in the conviction of 298 persons for rash driving, etc., and motor fatalities decreased from 26 to 21. The Non-co-operation movement, with its boycotting of Royal personages, and the mill strikes referred to elsewhere, made the year 1921 the most trying in the history of the Force. Matters became so serious during the strike period that a punitive force was quartered in the disaffected area. The report of a committee which sat to inquire into the riots has called attention to the inadequate numbers of the Force and of the armed reserves.

CRIMINAL JUSTICE (1921)

[*Statistics of Criminal Courts in the Madras Presidency for the year 1921; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Criminal Justice*]

General

361. On the 31st December 1921, there were in the Presidency 960 criminal Courts including the High Court, as against 912 at the end of the previous calendar year. In addition, the Subordinate Judges of Guntūr-Kurnool, Madura, Salem and Tinnevelly exercised the powers of an Assistant Sessions Judge. A Special Martial Law Tribunal of three Judges sat from the 23rd September onwards to try cases arising out of the Mappilla rebellion; this tribunal (whose work is not included in the statistical tables) took cognizance of 123 cases involving 2,058 persons, disposed of 39 cases involving 558 persons, of whom 85 per cent were convicted, and transferred 38 cases involving 522 persons to Special Magistrates under the Martial Law (Special Magistrates) Ordinance; the remainder of the cases were pending at the close of the year. The majority of these cases were of a grave nature such as waging war, murder, dacoity, etc. To deal with rebellion cases of minor importance, certain magistrates already serving in the Malabar district were invested with the powers of summary courts under the Martial Law Ordinance, including powers of punishment equivalent to those of a first-class magistrate. At the close of the year there were 95 Honorary Magistrates serving on the Madras City Benches, which worked throughout the year. New first-class Bench Courts were established in fourteen districts and with a few exceptions rendered useful assistance in relieving the stipendiary magistrates of some of their less serious cases. The number of Village Magistrates who exercised criminal jurisdiction was 3,153, an increase of two over the previous figure. The total number of criminal cases instituted fell from 318,476 to 295,620, the decrease being shared by most districts; the chief cause was probably an improvement in economic conditions. Appeals fell in number from 8,723 to 8,007; the average for the preceding five years was 9,324.

Original cases

Village courts

Regular magistrates

Presidency Magistrates

362. In the Courts of Village Magistrates, the number of cases instituted fell from 8,692 to 7,798, and the number of persons tried from 14,413 to 13,206. The percentage of convictions fell from 15·48 to 14·39, but varied greatly in different districts, ranging from 5 in Tanjore to 76 in South Arcot; the only conclusion that can be drawn from this variation is the prevalence in some districts, either of laxity in the admission of frivolous cases or of unwillingness to convict. In the Courts of regular magistrates in the mufassal, the number of cases instituted fell from 279,071 to 257,928, of which 6,833 were pending at the end of the year as against 6,645 in 1920. The average duration of trial rose from 7·3 days to 9·8 days. Before Bench Courts the average duration was three days, before sub-magistrates 13 days, before assistant magistrates 15 days, before joint magistrates 30 days, and before deputy magistrates 36 days. In the Courts of the Presidency Magistrates the number of cases instituted fell from 33,537 to 27,521. The subordinate mufassal Courts committed 2,154 cases to the Courts of Sessions, an increase of 401 on the previous figure, the greater part of which was contributed by the Agency Division

Sessions Courts

and Tinnevelly and Coimbatore. The number of cases pending in all the Sessions Courts at the end of the year was 151 as against 171, Coimbatore and Tinnevelly contributing the highest number. The average duration fell from 56 to 54 days. The percentage of acquittals in sessions cases was again 46·22; there was a remarkable variation between the various districts, Ganjām showing a conviction percentage of 20·46, while the Agency figure was as high as 85·68. Twenty-nine cases were committed

High Court

to the High Court Sessions as against 40 in 1920, and two cases were pending at the close of the year.

Appeals

Magistrates

363. The number of persons who appealed from the sentences of second and third-class Magistrates to the courts of first-class Magistrates fell substantially from 13,077 to 12,103, but the number of appeals pending at the end of the year was 1,104, or only 60 less than at the beginning. The percentage of successful appeals rose to 33·59 from 31·94 and the duration

Sessions Court

of appeals in the courts of Subdivisional Magistrates rose from 22 to 25 days. Of the persons sentenced by first-class Magistrates, 2,276 appealed to the Sessions Courts as against 2,226 in 1920; the appeals of 165 of these persons were pending at the close of the year, the last year's figure being 247. The average duration of an appeal fell from 35 to 29 days, and the percentage of successful appeals from 22·67 to 18·75. The number of

High Court

appellants to the High Court was 1,450 or 183 less than in 1920. The Government appealed against the acquittal of 110 persons; of these, the acquittal of 54 persons was upheld, the decision in 40 cases was reversed and a conviction was recorded, in three cases a new trial was ordered, and appeals were pending in the case of 13 persons. Of the private appeals, 273 were rejected *in limine*; the finding and sentence was upheld in the case of 863 persons, and in 168 cases the sentence was reduced or otherwise altered. The final pendency fell from 275 to 133, and the average duration again fell by 1 day to 48 days. The percentage of entirely successful appellants fell from 7·36 to 5·79.

Reference and revision

364. District Magistrates received 605 applications for revision as against 759 in 1920, and took up fifteen cases *suo motu* or on reports from their Subdivisional Magistrates, compared with eleven cases in the previous year. The corresponding figures for the Sessions Courts were 578 and 26, as against 512 and 32 in 1920, and for the High Court 815 and 145 as against 807 and 131. The death sentences on 159 persons were referred to the High Court for confirmation; of these, the sentences passed on 98 persons was confirmed. In 35 cases a sentence of transportation for life was substituted and terms of rigorous imprisonment in three cases. Twenty-two convictions were reversed, and one new trial was ordered. One person was sentenced to death at the High Court Sessions.

Jury system

365. The number of persons tried by jury was 1,629 as against 2,038 in 1920; the verdict of the jury was approved by the presiding Judge in the case of 1,585 persons and accepted in those of 11 more. Out of the cases referred to the High Court, the verdict of the jury was upheld in regard to 28 persons, modified in the case of 9 and reversed in regard to 19, of whom 11 had been found "guilty" and 8 "not guilty" by the jury. On the whole the system worked satisfactorily. The number of persons tried with the aid of assessors was 2,556. In the case of 1,612 of these the Judge agreed with all the assessors; in the case of 318 he differed from one or more and in the case of 626 he differed from all the assessors.

Miscellaneous

366. The number of complaints rejected under section 203 of the Code of Criminal Procedure was 14,574 or 13·18 per cent of the cases for disposal under the Indian Penal Code. This percentage is lower than in 1920 and the high percentage of cases which ended in the acquittal or discharge of the accused clearly indicates that insufficient use was made of the section. The same may be said with regard to section 250 of the Criminal Procedure Code under which compensation was awarded only in 1,628 cases as compared with 1,852 in the previous year. In spite of an increase of lawlessness of which the most striking exhibitions were the rebellion in

Malabar and the riots in Madras City, the total number of cases under the Indian Penal Code fell from 111,677 to 102,696, the most noticeable decreases being under theft, offences against public health, hurt and assaults. On the other hand the number of murders was large, especially in Coimbatore, Cuddapah and Salem and as a result of non-co-operation activity there was an increase of prosecutions for contempts of lawful authority and in the recourse to the preventive sections of the Code of Criminal Procedure. The total number of sentences passed during the year was 201,053, compared with 223,801 in 1920; of these, 99 were sentences of death, 217 of transportation, 10 of penal servitude, 22,560 of rigorous imprisonment, 3,772 of simple imprisonment, 12 of forfeiture of property, 173,562 of fine and 821 of whipping. The number of juvenile offenders was 2,247 boys and 678 girls, of whom more than half were found guilty of offences under the Forest Act. The number of sentences of imprisonment for 15 days or less was 4,903. The total amount of fines imposed fell from Rs. 11·39 lakhs to Rs. 10·83 lakhs, and the amount awarded in compensation fell also from Rs. 0·55 lakh to Rs. 0·54 lakh.

Punishments

PRISONS (1921)

[*Report on the administration of the Jails of the Madras Presidency, 1921; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

367. The number of central jails increased from 9 to 10; but the number of district, special and subsidiary jails remained the same as in the previous year, viz., 4, 2 and 320, respectively. At the close of the year, accommodation was available for 15,269 prisoners as compared with 12,394 on the corresponding date of the preceding year. The Māppilla rebellion and the non-co-operation movement brought a large influx of prisoners to jail and not only taxed the accommodation in the existing jails to its utmost limit, but also necessitated the opening of an additional central jail at Bellary.

Accommodation

368. The year opened with a population of 15,459 prisoners of all classes; 122,837 prisoners were received and 117,424 were discharged, leaving 20,872 in confinement at the close of the year. The total daily average of all classes rose from 15,427·99 to 15,985·60. The increase is due mainly to the Māppilla rebellion in Malabar and the non-co-operation movement. The year opened with 3,143 under-trial prisoners and 56,487 were admitted during the year, making a total of 59,630. The daily average rose from 3,379·45 to 3,461·58. Of the number confined, 44·17 per cent were convicted and 55·48 were acquitted and released; 47 under-trial prisoners escaped and 57 died. Prisoners awaiting trial before Sessions Courts were detained on an average for 40·88 days and those pending trial before Magistrates for 17·73 days. There were 403 civil prisoners in custody at the beginning of the year. Three thousand one hundred and seventy-eight were received and 3,001 released during the year. One escaped, 15 were transferred and 5 died, leaving 559 at the close of the year. The daily average was 351·33 as compared with 309·50 in the previous year. No State prisoner remained in jail at the beginning of the year and there were no admissions during the year.

Prisoners of all classes

Under-trial prisoners

Civil prisoners

State prisoners

369. At the opening of the year, the convict population stood at 11,619 males and 294 females. The direct admissions to various jails numbered 29,258 males and 1,190 females as compared with 26,409 males and 1,245 females, respectively, in 1920. There were 32,724 convicts received by transfer as compared with 28,933 in 1920. Of those discharged, 2,979 were released on appeal, 20,708 on the expiry of their sentences, 3,534 under the remission rules and 61 by order of Government. Only 46 convicts were deported to the Andamans and those deportations were at the beginning of the year, further deportations being stopped under the orders of

Convicts

Government, consequent on the decision arrived at to close down the Penal Settlement at Port Blair ; 29 were transferred to the Lunatic Asylum ; 9 escaped and were still at large at the end of the year ; 90 were executed and 277 died. At the close of the year 15,598 convicts were in custody—an increase of 3,685 on the corresponding figure of the previous year. The daily average convict population was 12,172·69 or 433·65 more than in 1920. The great bulk of the persons admitted were Hindus, who formed 77·36 per cent ; the Muhammadan and Christian percentages were 19·75 and 2·89, respectively. The number of persons under the age of 16 convicted advanced from 138 to 145, and the

Juveniles

number of youthful offenders increased from 24 to 48. Māppilla juveniles account for 20 of these admissions. Only 11 boys were transferred to the Reformatory School, Chingleput. Of the remainder, 14 were released on the expiry of their sentences, and 23 were undergoing sentence at the end of the year of whom 2 are females. At the beginning of the year, there were 332 inmates at the Borstal Institution, Tanjore, of whom 261 were between 15 to 21 years of age, 69 between 21 to 23 and 2 aged over 23 years. Twenty-one adolescents were received by direct committal, 356 were transferred from other jails and 380 were discharged, leaving 329 inmates at the end of the year. The instruction imparted to the inmates was the same as in the previous year. An Urdu teacher has since been added to the establishment to instruct Muhammadans in their own language. Six inmates were released conditionally during the year. A district committee of the Madras Discharged Prisoners' Aid Society was established at Tanjore during the year and it is hoped that judicious efforts will be made to help deserving inmates on release and to watch their progress.

Conduct

370. During the year 65 prisoners succeeded in escaping, of whom 51 were from the Central Jail, Trichinopoly, 3 from the Central Jail, Salem, 2 from the Borstal Institution, Tanjore, and the remaining 9 from the subsidiary jails. Sixty-one convicts including 4 who escaped in previous years were recaptured during the year. There was an appreciable decrease in the total number of offences dealt with by Superintendents from 6,966 to 4,863. Fifteen offences were dealt with by Criminal Courts. The total number of punishments and the ratio per cent of punishments to the average strength fell from 7,015 and 59·76 to 4,910 and 40·34, respectively. There was a decline in all forms of punishments except "Penal diet." Corporal punishment was inflicted on 4 prisoners as

Habituals

against 3 in the preceding year. There were 3,816 habitual convicts in custody at the beginning of the year and 3,635 were admitted during the year making a total of 7,451 out of a convict population of 33,004. The habituals formed 22·58 per cent of the convict population and were the recipients of 2,108 of the total number of punishments and 2 out of 4 whippings. The number of convicts released under the remission rules increased from 3,290 to 3,534 in the year under report. Three convicts

Remission

who came under the remission rules failed to gain any remission. Special remission for continuous good conduct was awarded to 2,244 convicts as against 2,264 in the previous year. Extra remission for work turned out over and above the prescribed task was earned by 648 convicts. Ten convicts earned a gratuity in lieu of remission. As in the previous year,

Education

elementary education was compulsorily imparted in all jails to prisoners under 30 years of age, by the paid teaching staff. Lectures on moral and religious subjects were delivered by honorary lecturers and on sanitary matters by the Medical subordinates attached to jails. The jail schools are frequently visited by officers of the Educational Department, and their suggestions are carried out as far as practicable. The technical teaching of all convicts employed in the various industrial departments receives the special attention of paid instructors. Each central and district jail is provided with a library and the prisoners are given facilities for reading and study. Recreation for well-behaved prisoners is being permitted between lock up and sleeping time on the suggestion of the Indian Jails Committee. The Discharged Prisoners' Aid Society was

formally inaugurated during the year and no less than twelve district committees were formed at various centres. It is believed that much useful work will be done by the society in helping deserving prisoners, reclaiming habitual offenders and reducing crime.

Vital statistics

371. The total admissions to hospital were 6,991 as against 7,046 in the year preceding ; the ratio per mille of average strength of admissions into hospital being 437·33 as against 456·70. The daily average number of sick and the ratio of sick per mille fell from 293·98 and 19·05 to 274·03 and 17·14, respectively. Notwithstanding reduced figures in the case of sickness, the mortality has gone up from 308 deaths or 19·96 per 1,000 in 1920 to 339 deaths or 21·21 per 1,000 in 1921. This increase in the mortality was due almost entirely to the number of deaths among Mappilla prisoners, many of whom when received were suffering from the effects of the exposure and privations to which they had been subjected before they were captured. Ten of the deaths included in the total were those of prisoners killed or injured in the course of the emeute in the Cannanore Jail in November 1921. Cholera accounted for 8 deaths and influenza continued to prevail in epidemic form and caused 38 deaths. The health statistics would have been decidedly favourable but for influenza and the abnormal sickness and mortality in the newly opened Mappilla Camp Jail at Bellary. This has since the end of the year been removed to the old barracks, where closer attention can be paid to health and sanitation and the accommodation is better. As a precautionary measure, all new admissions to prison are, as a matter of routine, carefully examined and any ailments discovered are treated at this early stage.

Sanitation

All wells are periodically cleaned and hankinised. In jails where the water analysis is reported to be unfavourable, water for drinking purposes is either boiled or chlorinated. The District Jail, Berhampur, was linked with the municipal water-supply. Two old pumps at Vellore and two challenge pumps at Palamcottah were repaired and brought into use. The installation of an oil-engine at Coimbatore is in progress, as are improvements to the drinking water-supply in the Central Jail, Bellary. At the Borstal Institution, Tanjore, the excavation of the large sub-artesian well was completed. At Cuddalore, land was acquired to prevent contamination of the water-supply. Fly-proof general kitchens are nearing completion in the Central Jails, Rajahmundry, Vellore, and Bellary, and the District Jail, Berhampur. At Rajahmundry a temporary addition to the kitchen has been made. At Palamcottah, the existing quarantine quarters were converted into a self-contained civil debtors' ward with a fly-proof kitchen, etc. At Rajahmundry, Vizagapatam and Cannanore, incinerators were erected. New latrines were built at Trichinopoly, Cuddalore, the Borstal Institution, Tanjore and Palamcottah. Latrines were repaired and fly-netted at Vellore, Salem, Vizagapatam, Cuddalore, the Borstal Institution, Tanjore, Palamcottah and Berhampur. At Bellary, latrines in connexion with the sanitary improvements of that jail were completed. An ejector truck was fitted up at Palamcottah. A masonry drain is under construction at Madura and special sullage drains were constructed at Salem and Coimbatore. At Rajahmundry a dispensary for the isolation hospital was constructed. A tubercular ward was added at Vellore. At Coimbatore the old post-mortem room was converted into a dispensary and a room in the hospital into a clinical laboratory. A medical inspection room was constructed at Cannanore. At Vizagapatam isolation hospital sheds were completed. At Cuddalore an operation theatre was erected and a new camping ground acquired. Many other minor sanitary improvements were effected during the year and some others contemplated had to be postponed for want of funds.

Finance

372. The total expenditure, excluding the outlay on jail buildings by the Public Works Department, amounted to Rs. 26,97,528, which is a decrease by Rs. 31,328, over that of the previous year and is due to an appreciable fall in the expenditure under the heads diet, hospital clothing and bedding, charges for moving prisoners and petty construction and repairs. The comparatively favourable rates at which ration and other articles were

purchased during the year, in spite of the rise in the average prison population, chiefly accounts for the low expenditure. The cash earnings during the year appreciably increased, from Rs. 77,335–15–0 to Rs. 3,43,798–12–0. This is due to larger and more regular orders from the consuming departments of Government. The net cost of maintaining prisoners and the average net cost per head decreased from Rs. 18,59,427–14–0 and Rs. 122–3–0 to Rs. 15,87,631–1–0 and Rs. 95–6–0, respectively. The outlay on Jail and Sub-Jail buildings, including the Inspector-General's office, was Rs. 2,61,362 against Rs. 2,24,922 in the preceding year.

Visits

373. His Excellency the Governor visited four Central and other jails during the year. Visits by official and non-official gentlemen increased to double last year's figure, owing to the larger number of visits prescribed in the revised rules.

CIVIL JUSTICE (1921)

[*Statistics of Civil Courts in the Madras Presidency for the year 1921; Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Civil Justice*]

General

374. The total number of District Courts rose during the year from 24 to 25 by the establishment at Negapatam of the East Tanjore Court, the civil jurisdiction over the district being divided between the new Court and the original Court at Tanjore, now re-named the West Tanjore Court. In addition to the permanent establishment of Courts, there were in existence 20 temporary Subordinate Judges' Courts and 26 temporary District Munsifs' Courts.

Litigation

375. The total number of suits instituted in the Presidency during 1921 was 496,244, a decrease of 189 from last year's figure. This total gives a proportion of one suit for every 85 persons of the Presidency population or one for every 31 persons in the case of the Presidency town alone; the corresponding figures for 1920 were 83 and 33. Malabar and Tanjore tied for the first place in the list of litigious districts, while, leaving out of account the Agency Division, Anantapur occupied the last place. Malabar, the most populous district, also showed the largest number of suits, and Anantapur again held the lowest place. The percentage of suits instituted in respect of money or movable property was 89·1 of the total number of suits, as against 87·8 in 1920; this class of suit gained at the expense of suits for immovable property and of suits instituted in Revenue Courts, which fell from 25,380 and 27,112 to 21,377 and 24,351, respectively. The total value of suits instituted in Courts other than Village and Revenue Courts rose from Rs. 1,205·27 lakhs to Rs. 1,362·94 lakhs, and the average value again rose from Rs. 322 to Rs. 398. Apart from Revenue Courts, 24·19 per cent of the suits instituted were of the value of Rs. 20 or less against 28·32 per cent in the previous year, and 64·34 per cent of the suits were between the values of Rs. 20 and Rs. 500. The number of suits above Rs. 500 in value rose from 29,917 to 32,112. Suits triable by Village Courts but filed before higher tribunals showed a decrease of about 25 per cent from the previous figure. In 77·68 per cent of the suits disposed of the plaintiffs succeeded in obtaining the whole or part of the relief claimed by them; the corresponding figure for contested suits was 71·49 per cent. Appeals fell in number from 16,577 to 15,806.

Original Jurisdiction

Village Courts

Revenue Courts

376. There was a gratifying increase of over 33 per cent in the number of suits instituted in the courts of Village Munsifs and Benches, which are apparently becoming more popular with the litigant public. To this increase Malabar and South Kanara contributed the greatest share. In Revenue Courts, other than those in the Agency, the number of suits filed fell from 26,730 to 24,229, and disposals rose in number from 22,028 to 28,267, the pendency being reduced from 13,404 to 10,378. The average

duration of contested and of uncontested suits was 279 days and 118 days respectively, as against 309 days and 92 days in 1920. The percentage of appeals preferred in the case of appealable decrees fell from 21·35 to 11·32, and the percentage of decrees confirmed on appeal fell also by 10 per cent. In Agency Courts, the number of suits instituted fell from 2,137 to 1,538, and disposals numbered 1,701. There was a fall in the number of suits in the Courts of District Munsifs from 119,550 to 113,416. The rebellion in Malabar caused a notable decrease in that area. As a result of the number of disposals remaining almost stationary, the number of suits pending fell from 64,061 to 60,076 ; but there was a decided increase in the number of suits pending over one year. A fall of about 15 per cent in the number of Small Cause suits is apparently due to the increased powers of Village Courts. The average duration of contested ordinary and Small Cause suits rose from 328 days and 85 days respectively to 338 days and 88 days respectively. The percentage of appeals to appealable decrees remained practically stationary, and the percentage of confirmations rose from 58·24 to 59·59. In the Special Small Cause Courts, 17,025 suits were filed as against 13,602 in the previous year. The average duration of contested and uncontested suits was 94 days and 32 days respectively, as against 92 days and 26 days in last year. In Subordinate Judges' Courts, the number of suits instituted reached the record figure of 3,506. Although the number of disposals (3,568) exceeded the number of institutions, the transfer of suits from the files of District Courts and the remanding of suits on appeal led to a heavy increase in the number of suits pending. The figures show that the mass of litigation is swelling to a size beyond the control of the Subordinate Judges. The average duration of contested and uncontested original suits was 520 days and 84 days as against 503 days and 89 days in the previous year. Excluding the Court of the Agency Commissioner, District Judges took 589 ordinary suits on their files, approximately the same number as in 1920. Disposals increased from 226 to 288 and the pendency remained practically stationary. Appellate work occupied most of the time devoted by the District Courts to civil hearings. The average duration of contested original suits rose from 361 days to 479 days. In the Madras City Civil Court, institutions rose in number from 543 to 661, and disposals decreased from 608 to 607. In the Presidency Court of Small Causes, the number of suits instituted rose from 14,085 to 15,359, and the disposals also rose from 14,154 to 14,316. The number of suits filed in the High Court increased from 980 to 1,170, the increase occurring mainly in suits for money or movable property. Suits to the number of 1,033 were disposed of as against 811 in 1920, the number of contested suits thus disposed of being 624 as compared with 544 in the previcus year.

Agency Courts

District Munsifs' Courts

Special Small Cause Courts

Subordinate Judges' Courts

District Courts

City Civil Court

Presidency Small Cause Court

377. Sixty regular appeals were filed in the Agency Tracts as against 74 in 1920 : 98 appeals were disposed of and ten were left pending ; the percentage of confirmation fell from 46·97 to 44·57. In the District and Subordinate Judges' Courts the number of appeals decreased from 13,307 to 13,127. The Subordinate Judges disposed of 7,054 appeals, an increase of 572 on the previous figure. The arrears rose from 3,372 to 3,462, and the duration of contested and uncontested appeals was 352 days and 288 days, as against 321 days and 247 days, respectively, in the previous year. The District Judges disposed of 5,546 appeals, an increase of 717 on the last figure, and the arrears fell from 8,551 to 8,167. The average duration of contested and uncontested appeals was 351 days and 195 days as against 355 days and 294 days in the previous year. The High Court disposed of 259 appeals against the original decrees of mufassal courts, a decrease of 35 per cent from last year's figure ; the arrears increased from 550 to 661. Corresponding to the increased number of disposals on the Original Side, the number of appeals against such decrees rose from 108 to 127 ; of these, 65 were disposed of, as against 106 in 1920, and the arrears rose from 80 to 142. The number of Letters Patent appeals (other than Original Side appeals) filed was 37 against 22 in the last year ; disposals fell in number from 36 to 27, and the arrears rose

Appellate Courts

District and Subordinate Judges' Courts

High Court

from 14 to 24. Appeals against appellate decrees fell considerably, and the disposals and arrears decreased in proportion. The percentage of appeals dismissed was - first appeals from District Courts 46·43, from Subordinate Judges' Courts 61·21, from the City Civil Court 76·92, from Original Side appeals 66·15, second appeals 65·02 and Letters Patent appeals, 59·26. Nine hundred and thirty-eight revision petitions were filed in the High Court, of which 348 concerned Small Cause suits. Disposals fell in number from 1,505 to 825. The percentage of petitions of all descriptions dismissed fell from 89·37 to 75·03. Eighteen cases were referred to the High Court, affecting points under such enactments as the Divorce, Income-tax and Excess Profits Duty Acts.

Insolvency

378. In the mufassal courts, the number of insolvency petitions presented remained practically stationary, and there was little variation in the number of disposals and the extent of the arrears. In 1,609 of the 4,709 cases disposed of the petitions were granted. The total amount of creditors' claims admitted was Rs. 16·28 lakhs as against Rs. 15·30 lakhs in last year, and the amount of assets distributed rose from Rs. 3·77 lakhs to Rs. 5·39 lakhs. The number of insolvents discharged was 47. In the High Court, the number of petitions rose from 198 to 275 and disposals fell from 244 to 202, the arrears increasing from 899 to 978. Three hundred and eighteen persons were adjudged insolvent, and 123 were discharged. Claims to the extent of Rs. 18·70 lakhs were admitted and Rs. 3·69 lakhs were paid out as dividends to creditors.

Miscellaneous

Execution

379. In all the mufassal courts except village courts the total number of execution applications was 336,998 as against 348,454 in 1920. The number of applications disposed of was 338,840, and 50,752 were left pending. Satisfaction in full was obtained in 16·56 per cent of the applications disposed of, and satisfaction in part was obtained in 7·19 per cent. Debtors imprisoned in execution rose in number from 2,469 to 2,600. In the mufassal courts other than village courts, the average number of processes executed by each amin and peon was 160 and 369 respectively, as against 159 and 400 in 1920. The system of permitting District Munsifs of seven years' standing to dictate judgments in open court to shorthand writers worked satisfactorily.

Finance

380. The total receipts of civil and criminal courts in the Presidency amounted to Rs. 123·44 lakhs and the charges to Rs. 105·76 lakhs, leaving a surplus of Rs. 17·68 lakhs ; this surplus is an increase of Rs. 11·02 lakhs on the previous figure ; but in the year under review the usual contribution to the " Charges of District Administration " head was only debited to the Judicial budget for three months. The net profit to Government from Civil Justice may be estimated roughly at Rs. 22½ lakhs.

REGISTRATION (1921) AND COMPANIES (1921-22)

[*G.Os. No. 92, Law (Registration), dated the 10th May 1922, and No. 1594, Law (General), dated the 28th June 1922 ; Statistics of British India, Vol. I, Commercial, and Vol. IV, Administrative, Judicial, etc.—Joint Stock Companies—Registration*]

Registration

Administrative changes

381. By the bifurcation of the registration district of South Arcot into the districts of Cuddalore and Villupuram with headquarters at those stations from the 1st January 1921, the number of district charges rose from 28 to 29 and of District Registrars from 31 to 32. Permanent sub-offices were opened at Kilappaluvur (Trichinopoly), Mylapore (Madras-Chingleput), Puduchatram and Edappadi (Salem) and an additional sub-registrar was appointed to work jointly with the officer at Amalāpuram (Gōdāvari). The continuance of the temporary sub-offices at Kosigi (Bellary), Adirampatnam (Tanjore) and Gudur (Kurnool) for one

year from the 1st April 1921 and at Podili (Nellore) for two years from the 1st December 1921 was sanctioned. The number of sub-offices including temporary offices rose from 513 to 517 and the number of sub-registrars, including 10 sub-registrars working in the Inspector-General's office as clerks, from 560 to 576. The convenience of the public was also promoted by the re-adjustment of the jurisdiction of the existing sub-districts in fifteen districts. The records of nine offices and the buildings of eight offices in the Calicut and Palghat districts were burnt in the Māppilla rebellion. Wherever feasible the burnt offices have been re-opened and in other cases the offices were amalgamated with existing offices. Registrations declined from 1,561,936 to 1,420,132 or by 9·08 per cent, the decrease occurring in all districts except North Arcot and Negapatam where there was a slight increase of 243 and 2,662 registrations, respectively. The decrease was largest (36,896) in Palghat and Calicut districts owing to the Māppilla rebellion. Except gifts, all classes of documents showed a decrease. The aggregate value of documents declined by 4·3 per cent, while the average value of documents affecting immovable property rose from Rs. 413 to Rs. 432 and of those affecting movables from Rs. 526 to Rs. 622. There was consequently a slight increase in the average registration fee from Rs. 1–10–7 to Rs. 1–11–5. Applications for encumbrance certificates rose from 50,469 to 53,311 and those for copies fell from 129,280 to 102,453. Documents presented by or on behalf of co-operative societies exhibited an increase from 23,355 to 30,395 and searches rose from 3,332 to 4,157, the fees foregone being Rs. 86,681 against Rs. 65,887. Seven cases of prosecutions under the Indian Registration Act were pending at the commencement of the year and ten were instituted in the year. Of these five ended in conviction and four in acquittal, leaving eight pending. Consequent on a decline in registrations and minor operations, the income from fees on registrations fell from Rs. 25·96 lakhs to Rs. 24·24 lakhs and other receipts from Rs. ·20 lakh to Rs. ·19 lakh. On the other hand there was a slight increase in the fees for searches from Rs. 4·05 lakhs to Rs. 4·11 lakhs. The total income declined from Rs. 32·19 lakhs to Rs. 30·54 lakhs. The fee for attendance at a private residence was raised from Rs. 10 to Rs. 20. The scale of registration fees for documents of a value above Rs. 200 has been raised from the 1st March 1922. The expenditure in the department rose from Rs. 21·92 lakhs to Rs. 25·13 lakhs, mainly on account of the improvements in the pay of the officers and their establishment and the increase in the price of stationery.

Registrations

Value of transactions

Searches and copies

Co-operative societies

Prosecutions

Finance

382. Despite the fact that there were various factors at work during the year such as the uncertainty of exchange, the general depression in trade and the non-co-operation movement, which tended to retard the development of the existing companies and the starting of new ones, the number of companies rose from 576 (479 public and 97 private) to 645 (538 public and 107 private). The number of companies registered and wound up were 118 and 48, respectively, against 120 and 30 in the previous year. About 59 per cent of the companies registered and 75 per cent of those wound up were trading and industrial concerns. The number of registrations fell from 120 to 118. There were no registrations at all in Ganjām, Vizagapatam, Gōdāvari, Guntūr, Nellore, Bellary, Anantapur, Cuddapah and Chittoor, partly owing to the non-co-operation movement. The largest number of registrations was, as usual, in the districts of Madras and Coimbatore. Of the new companies, four publishing and printing concerns and five industrial and weaving concerns were the outcome of the spirit of nationalism which has found vent in the use of the charka and the manufacture of Swadeshi goods. These companies have evidently sought the hall-mark of registration as a sure passport to public confidence. One remarkable feature of the new companies is that, profiting by the experience gained in previous years, the promoters have taken care not to boom them with an unduly large authorized capital. The number of licensed "associations not for profit" increased from 51 to 58. The average paid-up capital of a company fell

Registered companies

The Indian Companies Act, 1913

from Rs. 1·79 lakhs to Rs. 1·70 lakhs owing to the preponderance of small banking and loan concerns known as "nidhis" whose regulations permit of the return of paid-up capital. Excluding such companies the average paid-up capital was 2·3 lakhs. The number of companies established outside British India and having a place of business in this Presidency rose from 146 to 148. The new companies have their registered offices in the United Kingdom, the United States of America and Cochin. Five companies which failed to comply with the requirements of the Act were prosecuted, convicted and fined. Consequent upon the decrease in the number and the amount of the authorized capital of new companies, the receipts fell from Rs. 37,705 to Rs. 33,346. The expenditure rose from Rs. 15,183 to Rs. 30,514 mainly on account of the debit to this department of Rs. 12,000 being the estimated value of the work done on its behalf by the Inspector-General of Registration and the mufassal District Registrars as ex-officio Registrar and Assistant Registrars of Joint Stock Companies, respectively. At the close of the year there were 34 certificated auditors entitled to audit the accounts of registered concerns; of these 6 were holders of permanent unrestricted certificates, 8 of permanent restricted certificates, 17 of restricted certificates without limitation of time and 3 of temporary restricted certificates. The number of Chartered and Incorporated Accountants who are exempted from holding such certificates continued to be 4. The number of certificated auditors authorized to take and train apprentices under the regulations for the award of the Bombay Diploma in Accountancy rose from 4 to 6. District Courts were empowered to dispose of applications for filing belated returns of allotments under section 104. Skeleton forms for the preparation of company documents were printed and stocked for sale to the public at a nominal price. The use of these forms is much appreciated by the companies, since it saves time and correspondence besides leading to a better knowledge of the provisions of the Act. One Provident Insurance Society was registered and one wound up. The total number of societies continued to be 12. The bulk of these societies are managed by missionaries for the poorer members of their congregations. The receipts rose from Rs. 45 to Rs. 104. There was no expenditure. There were seven Life Assurance Companies at work at the close of the year.

Provident Insurance Societies and Life Assurance Companies

Notaries Public (1921-22)

383. By the destruction of the Vandur sub-registry office (Calicut district) in the recent Māppilla rebellion the number of registering officers who exercised the functions of a Notary Public fell from 196 to 195. The operations were confined to 23 stations as against 18 in the previous year. The total number of transactions rose from 122 to 249 with an aggregate value of Rs. 5,34,472 as against Rs. 1,61,500 in the previous year. The large increase in the total number of instruments dealt with was due to the presentation at Cocanada of a large number of bills (55) drawn on a Bombay merchant for being noted for non-payment and to an increase in the number of bills presented in Cochin and Tuticorin on account of merchants engaged in foreign trade not being able to meet demands consequent on the stringency of the money market. A sum of Rs. 972-7-0 was realized in fees during the year as against Rs. 473-4-0 in 1920-21 and Rs. 44-14-0 were expended as against Rs. 20-15-6. The balance of Rs. 932-9-0 (including an unremitted balance of Rs. 5 of 1920-21) was remitted to the treasury. There were no inspections by District Judges under rule 4 of the Notarial Rules.

CO-OPERATIVE SOCIETIES

(1ST JULY 1921 TO 30TH JUNE 1922)

[*Report on the working of the Co-operative Societies Act (II of 1912) for the year 1921–22; Statistics of British India, Vol. II, Financial Statistics, Part I, Co-operative Societies*]

General

384. A brief account of the outstanding features of the year's work has already been given in the "General Summary" in Part I of this report. This summary aims at giving the facts and figures in fuller detail.

385. The Department sustained a severe loss during the year by the death of Mr. F. R. Hemingway, I.C.S., the Registrar of Co-operative Societies and the author of the recently-published Co-operative Manual. At the end of the year there were twenty-two independent territorial sections in charge of Assistant Registrars, and the co-operative work of the Agency division was in charge of the Co-operative Assistant to the Commissioner. The assistance given by the Assistant Commissioners of Labour in organizing societies for the benefit of field labourers ceased in April 1922 on the abolition of these posts. At the end of the year the number of gentlemen who were working in the districts as Honorary Assistant Registrars had increased from 55 to 61. To the 6,289 societies which were under registration at the beginning of the year 1,169 new societies were added, and the cancellation of the registration of 69 old societies brought the closing figure to 7,389. As in last year, the number of new societies showed a falling-off; there are two possible explanations for this decrease; the rate of interest charged on loans to the members of primary societies was raised from $9\frac{3}{8}$ to $10\frac{15}{16}$ per cent; this enhancement, necessitated by the state of the money market, was not accompanied by a similar rise in the rates of the ryot money-lenders, and the margin of benefit is not now so obvious to the more influential villager. Again, the Madras Central Urban Bank reduced the maximum period for long-term loans from eleven to seven years. The number of cancellations shown above was almost double the number in the previous year, and this weeding-out and the re-constitution of dormant societies occupied a large portion of the activities of the Department. The total number of societies was composed of 33 financing banks (including the provincial bank), 211 unions (both supervising and propagandist), 6,289 agricultural societies and 856 non-agricultural societies; the last-named included 694 credit societies, 136 purchase and production societies and 26 others. The registered societies (exclusive of supervising unions) had a total membership of 461,002 persons; the figures indicate that there has been a satisfactory growth in the membership of the older societies. The total working capital of all societies rose from Rs. 490·35 lakhs to Rs. 601·11 lakhs, and the total paid-up share capital increased from Rs. 64·87 lakhs to Rs. 79·86 lakhs. Deposits received from individuals rose from Rs. 177·77 lakhs to Rs. 206·14 lakhs and the reserve funds of all societies increased from Rs. 20·77 lakhs to Rs. 26·08 lakhs. The total closing capital employed in the movement was Rs. 292·72 lakhs; the very large interest of non-members has been noted in the "General Summary." The net divisible profits, exclusive of overdue interest and interest accrued on loans on which interest was overdue, amounted to Rs. 4·76 lakhs as against Rs. 2·92 lakhs in the previous year. The cost to Government of working the Act rose from Rs. 5·35 lakhs to Rs. 5·86 lakhs; but, taking into account the increase in the working capital of the societies, this figure shows in reality a percentage decrease from last year.

Working of the societies

Provincial and central banks

386. During the year the central banks invested a further sum of Rs. 45,250 in share capital in the Central Urban Bank. Satisfactory progress was made in the transfer from the Central Urban Bank to the district central banks of the loans originally given direct by the former to primary societies, the amount remaining to be transferred or recovered by

process being reduced from Rs. 9·03 lakhs to Rs. 2·85 lakhs. Every part of the Presidency is now served by a district central bank, and all the district banks are members of the provincial bank, with the solitary exception of the Christian Central Bank in Madras, which is debarred mainly on the technical ground that its operations extend to the whole Presidency, and not solely to its local clientèle. This objection has been met in part by the revision of the by-laws. The net profits of the provincial bank rose by about 42 per cent to Rs. 1·29 lakhs, although the working capital rose by only 9·54 per cent. This disparity is due partly to the payment in full by the district banks of all overdue interest when they took over the debts due by the primary societies, and partly to the fact that the rate of interest paid by the Provincial Bank to individuals was reduced while the rate charged to central banks remained the same. The amount drawn by the Provincial Bank on its overdraft with the Imperial Bank fell from Rs. 10·49 lakhs to Rs. 3·96 lakhs, due to the increasing independence of the district banks, which allowed the deposits to be utilized more and more for the reduction of the overdraft. The share capital of all the financing banks, including the Provincial Bank, rose from Rs. 23·6 lakhs to Rs. 29·34 lakhs and the reserve funds from Rs. 3·87 lakhs to Rs. 4·95 lakhs. Almost one half of the paid-up share capital of the district banks was held by the primary societies. There is now a balance in the hands of the primary societies sufficient to meet the demands for expansion of the district banks for a considerable time to come. The share capital *plus* the reserve funds of all the financing banks was 23·44 per cent of the amount borrowed from outside sources ; the steady growth of this percentage indicates the increasing strength of these banks. For part of the year the demands of the primary societies could not keep pace with the stream of deposits flowing into the financing banks, which accordingly had in their hands a considerable surplus not required by the societies. During the year the Government permitted the investment of railway cess, Local Boards' surplus funds and abkāri deposits in approved banks ; Rs. 9·23 lakhs reached the banks from these new sources. There was a marked improvement in the repayments of principal and current interest. The Imperial Bank of India continued to assist the movement by permitting overdrafts to the financing banks at a flat rate of 6 per cent ; the closing overdraft amounted to Rs. 35·2 lakhs. Agricultural credit societies increased in number from 5,207 to 6,206, and the total membership of agricultural societies of all classes rose from 280,299 to 333,342. The movement has spread widely among all castes, and it is especially gratifying to record an increase of over 30 per cent in the numbers of the Ādi-Drāvida members. The working capital of all agricultural credit societies rose from Rs. 184·48 lakhs to Rs. 222·92 lakhs, and the paid-up share capital increased from Rs. 18·20 lakhs to Rs. 23·11 lakhs. Loans from financing banks increased from Rs. 141·92 lakhs to Rs. 173·06 lakhs. The deposit figures show that there is ample room for further strenuous propaganda in the inculcation of thrift in the members. Most of the districts showed a substantial increase in the amount of share capital. The total divisible profit rose from Rs. 1·95 lakhs to Rs. 3·38 lakhs ; roughly one half of the total number of societies contributed to this figure. The total closing unrecouped loss amounted to Rs. 3·17 lakhs ; but this calculation excludes all overdue and accrued interest, and the real loss, allowing for overdue interest, was only Rs. 20,801. There was a considerable improvement in the collection of arrear interest, but the collection of principal and current interest showed a falling-off, due principally to the adverse economic conditions in some localities. The seventy-five purchase or purchase and sale societies sold Rs. 2·54 lakhs' worth of goods to their members and bought Rs. 1·89 lakhs' worth of their products. Thirty-seven of these societies worked at a total profit of Rs. 14,000, and thirty-four of them incurred a total loss of Rs. 13,000. But the book profit was Rs. 20,000. The transactions of agricultural trading societies fell off considerably, the value of sales to members decreasing from Rs. 3·72 lakhs to Rs. 2·55 lakhs. Similarly, the

Agricultural societies

value of joint purchases by credit societies fell from Rs. 1·93 lakhs to Rs. 1·62 lakhs, and joint sales fell from Rs. 61,000 to Rs. 45,000. Joint purchase is still heavily handicapped by the difficulty of forecasting the wants of the members, the rivalry of the local markets, the reluctance of the people to hold a large stock of commodities in hand and the very limited wants of the average villager. Joint sale is hampered by the difficulty of grading the products and the conservative tendencies of the members. Non-agricultural credit societies rose in number from 614 to 694, of which 532 were on a limited liability basis and 162 on an unlimited liability basis. The net divisible profit increased from Rs. 2·05 lakhs to Rs. 2·77 lakhs, and the real loss of a few societies was Rs. 3,000 odd. The collection of principal and arrear interest improved but the collection of current interest showed a deterioriation. There was a very noticeable increase in the flow of deposits both from members and from non-members. At the end of the year there were 136 societies for the purchase and purchase and sale or for the production and production and sale of commodities. Co-operative stores fell in number from 103 to 91 and their sales and purchases respectively fell and rose in value from Rs. 17 lakhs and Rs. 15·17 lakhs to Rs. 16·25 lakhs and Rs. 15·42 lakhs. The net divisible profit rose from Rs. 12,700 to Rs. 42,700, and the net loss incurred by certain societies was Rs. 32,000; there is room for economy in management in the case of many societies. Weavers' societies rose in number from 32 to 34. Purchases and sales rose from Rs. 3·31 lakhs and Rs. 3·27 lakhs to Rs. 3·43 lakhs and Rs. 3·59 lakhs, respectively. The progress in the working of societies of this description is not encouraging. The main obstacles at present are the financial weakness of the units, the opposition of capitalist yarn and cloth merchants, the frequent difficulty in finding a good local market and the vagaries of the prices of yarn. An attempt is to be made to overcome these obstacles by the formation of one or more strong central societies with influential members, which will be permitted to sell raw materials to non-members.

Non-agricultural societies

387. Under "Others" there were twenty-six societies at the end of the year; fifteen of these were building societies. Progress in the operations of building societies is hindered by the shortage of long-term money at reasonable rates, but there is some prospect of obtaining facilities from Government in the matter. There were also three printing presses run by co-operative societies; four societies exist for labour objects—the execution of road-repairing contracts, the working of fishery leases, etc.; and the remaining four bodies are engaged in running a motor service, selling books to scholars, conducting a hostel and supplying milk to their members. Almost all of these miscellaneous ventures have been a distinct success. At the end of the year there were 713 societies composed wholly or mainly of Ādi-Drāvidas. Of these, 339 societies have been organized by and are in the charge of the Labour Department, in four selected districts—Tanjore, Gōdāvari, Chingleput and South Arcot. The scavengers and sweepers in municipalities now have 29 separate societies, and they are eligible for membership in 32 other bodies. On the whole the municipal authorities have shown a sympathetic and actively helpful attitude towards these organizations. The evil effects of the recent labour troubles are still visible in the comparative failure of attempts to start co-operative societies for the benefit of factory workers.

Miscellaneous societies

388. The number of supervising unions rose from 177 to 209. In addition, there were two propagandistic unions at Madras and Masulipatam. The number of primary societies affiliated to these unions increased from 4,410 to 5,494. In areas where no supervising agencies are available, the task of supervision is undertaken by the Government staff. The receipts towards the supervision fund amounted to Rs. 2·17 lakhs and the expenditure to Rs. 1·26 lakhs. There was a steady increase in the amount contributed by primary societies for their own supervision by means of non-official agencies. Arbitration references grew in number, owing chiefly to the systematic overhauling of bad societies. There is

Miscellaneous

still much room for improvement in the speedy disposal of liquidation proceedings ; the Act has recently been amended to allow of the recovery of the assets of liquidated societies as if they were arrears of land revenue. Besides a Provincial Conference held at Madras in December 1921, there were five district conferences and a very large number of local conferences. The Co-operative and Agricultural authorities met in conference to arrange for the co-ordination of their endeavours. Throughout the year the attitude of the general public towards the movement continued to be all that could be desired.

LOCAL BOARD ADMINISTRATION (1921-22) *

[*Statistics of British India, Vol. IV, Local Self-Government—District and Sub-District Boards*]

General

Constitution and strength

District boards

389. The number of district boards remained the same (24) and the total strength of members on them was 872. All the district boards except that of the Nilgiris are presided over by non-officials. At the end of the year 795 members were taking part in the deliberations of district boards in the Presidency. Of these 103 were ex-officio, 189 nominated by the Government and the remaining 503 elected by taluk boards, as against 121, 151 and 485, respectively, in all the districts in the previous year. Two

Taluk boards

hundred and ninety-five meetings were held by district boards. The number of taluk boards was 121 or two more than in the previous year. The number of boards which elected their own presidents increased from 38 to 48, and 63 others, or four more than in the previous year, had nominated non-official presidents. The sanctioned strength of taluk boards increased by 157 to 1,939. The actual number of members at the end of the year on the taluk boards in the Presidency was 1,879, of whom 116 were officials and 1,763 non-officials as against 176 and 1,681, respectively, in all the taluk boards in the previous year. Of the 1,218 seats open to election in the year, 712 were actually so filled and in the case of 397 elections which were contested, 34·9 per cent of the registered voters came to the poll, as against 32·03 per cent in 1920-21. One thousand

Union boards

four hundred and ninety-six meetings were held by taluk boards. The number of union boards which assisted in the administration of local affairs in important villages fell by 10 to 579. The actual number of members on the 31st March 1922 on these boards was 4,207 of whom 790 were village headmen, 2,350 were nominated and 1,067 were elected.

Finance

Receipts

390. The new Local Boards Act, which came into force from 1st April 1921, limits the rate at which land cess can be levied to one anna in the rupee on the annual rent value of occupied lands. Accordingly the land cess is levied at a uniform rate of one anna in all the districts. The new Act makes no provision for the levy of a special cess of 3 pies for the construction of railways or tramways, but an additional cess of three pies may be levied for the purposes of a district board or taluk board alone. Such additional cess was levied by 13 district boards and 62 taluk boards. The levy of profession and companies' taxes is also authorized by the new Act. The former was levied during the year by 33 taluk boards and the latter by 29 taluk boards. Tolls upon carriages, carts and animals were collected in all districts. House-tax was collected in all unions. The cash balance under local funds at the begining of the year was Rs. 81·26 lakhs. The total receipts amounted to Rs. 213·47 lakhs. The net revenue from tolls declined in 13 districts, the total income falling by Rs. 1·11 lakhs to Rs. 18·64 lakhs. The grants received from Provincial funds amounted to Rs. 65·01 lakhs. A sum of Rs. 17·92 lakhs was granted from Provincial funds in aid of the general resources of local boards, including a sum of Rs. 0·64 lakh not disbursed in the previous year ; Rs. 14·16 lakhs were granted for trunk roads, the responsibility for the maintenance of which

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* These figures exclude the reports of the Madura and Kistna District Boards.

was assumed by the Government from 1920–21, though the grant was disbursed after the close of the year; Rs. 31·53 lakhs were granted for education, and Rs. 1·42 lakhs for hospitals and dispensaries. A grant of Rs. 0·87 lakh was also paid as usual to the Nilgiri District Board for public works in consideration of the smallness of its revenues.

391. The total expenditure of local boards was Rs. 236·04 lakhs and the year closed with a balance of Rs. 58·69 lakhs. The outlay on communications was Rs. 80·49 lakhs, of which over Rs. 15 lakhs were met from Government grants. The length of the new roads constructed was 107½ miles, and the total mileage maintained at the end of the year was 23,528, of which 2,882½ miles are trunk roads, towards the maintenance of which the Government contribute at the maximum rate of Rs. 500 per mile. At the close of the year, local boards maintained 35 sessional schools for the training of teachers, one Sanskrit college, 139 secondary schools and 7,418 elementary schools. In the sessional schools 638 students received instruction and the total attendance at all the other schools was 461,166 pupils. The total expenditure of local boards on education was Rs. 50·88 lakhs, towards which provincial funds contributed Rs. 27·24 lakhs, while the income from fees and other receipts was Rs. 7·90 lakhs. The net outlay from local funds was thus Rs. 15·74 lakhs. The number of hospitals maintained by local boards was 99 and the number of dispensaries 298. The cost of their maintenance amounted to Rs. 16·22 lakhs, and 12,486 in-patients and 3,625,527 out-patients were treated in them. The number of vaccinators employed by local boards was 425 and they performed successful vaccinations on 685,482 persons or 20·4 per mille of the population. The total expenditure on preventive medicine including sanitation and water-supply amounted to Rs. 9·32 lakhs.

Expenditure

Communications

Education

Public Health

Vaccination

Sanitation, etc.

392. The only district boards which possess open railways are those of Tanjore, Coimbatore, Guntūr, Salem and Kistna. The total length of line is 237 miles and the total capital outlay thereon is Rs. 121·71 lakhs. The gross traffic earnings of the Tanjore District Board Railways increased by Rs. 0·89 lakh to Rs. 13·25 lakhs and the working expenses by Rs. 2 lakhs to Rs. 10·44 lakhs. A sum of Rs. 0·75 lakh was paid to Provincial funds towards the payment of interest on, and an instalment of the principal of, a loan advanced by Government, which stood at Rs. 6·70 lakhs at the end of the year. The profit derived from the working of the railway was Rs. 2·81 lakhs or only 4·22 per cent of the capital outlay (against 5·9 per cent in 1920–21). During the year a sum of Rs. 3·02 lakhs was appropriated to ordinary services and a further sum of Rs. 0·48 lakh was taken as a loan towards the expenditure on capital items under the service heads. The balance in favour of the railway cess fund at the end of the year was Rs. 35·09 lakhs. The gross earnings of the Podanur-Pollachi Railway were Rs. 2·96 lakhs and the working expenses Rs. 1·38 lakhs. The net profit on the working of the railway was Rs. 1·58 lakhs or 12·35 per cent of the capital outlay (against 13·01 per cent in 1920–21). The railway cess fund in the district closed with a balance of Rs. 11·80 lakhs. The gross earnings of the Tenali-Repalle line in Guntūr were Rs. 1·55 lakhs and the working expenses Rs. 0·78 lakh. The net earnings amounted to Rs. 0·77 lakh or 5·2 per cent on the capital outlay (against 6 per cent in 1920–21). The closing balance of the railway cess fund was Rs. 5·59 lakhs, excluding a sum of Rs. 0·70 lakh temporarily appropriated for ordinary service charges. The net earnings of the Suramangalam-Salem Railway amounted to Rs. 0·33 lakh or 6·7 per cent of the capital outlay (against 6 per cent in 1920–21). The closing balance of the railway cess fund was Rs. 7·14 lakhs. In Kistna, the gross earnings of the Bezwada-Masulipatam railway were Rs. 6·69 lakhs and the working expenses Rs. 3·01 lakhs. The net earnings of the line amounted to Rs. 3·68 lakhs or 16 per cent of the capital outlay (against 14 per cent in 1920–21). The closing balance of the railway cess fund was Rs. 26·11 lakhs.

Railways

MUNICIPAL ADMINISTRATION—MUFASSAL (1921-22)*

[*Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

General

393. The total number of municipal councils rose from 80 to 81, Saidapet having been newly constituted a municipality with effect from the 1st April 1921. The total sanctioned number of seats rose from 1,325 to 1,684 ; the number actually occupied at the end of the year was 1,660 ; of the members one was ex-officio, 437 nominated by the Government and the remaining 1,222 elected by the rate-payers. The system of appointing councillors by election was in force in 76 municipalities. The proportion of Indian to European and Anglo-Indian members increased further, though only 42 councils consisted entirely of Indian members as against 54 in the previous year. The councils held 2,398 meetings in all or 227 more than in the previous year, and 346 meetings were adjourned for want of a quorum. The average attendance of councillors at each meeting was 59·7 per cent of the total strength as against 55·98 per cent in 1920–21.

Finance

Receipts

394. The opening balance was Rs. 27·89 lakhs. Current receipts, excluding the opening balance, amounted to Rs. 126·38 lakhs. Of this Rs. 41·30 lakhs were derived from taxes, the average incidence of taxation per head of the population being Rs. 1–14–3, a decrease from the Rs. 1–15–10 of 1920–21. The grant from Provincial funds amounted to Rs. 9·90 lakhs of which Rs. 3·44 lakhs were for education, Rs. 0·60 lakh for trunk roads, Rs. 0·49 lakh for medical relief and the rest for other purposes.

Loans

Loans amounting to Rs. 7·52 lakhs were advanced by the Government, as against Rs. 2·07 lakhs in the previous year. The Madura municipal council took a loan of Rs. 4·85 lakhs for its drainage scheme, the Vellore municipal council a loan of Rs. 0·82 lakh for the same purpose and the Ootacamund municipal council Rs. 0·50 lakh for the lighting of the town with electricity.

Expenditure

395. The total expenditure amounted to Rs. 132·60 lakhs. Expenditure on communications amounted to Rs. 15·07 lakhs, of which Rs. 7·63 lakhs were spent on the maintenance of roads and Rs. 5·08 lakhs on lighting.

Communications

Water-supply and drainage

The Public Works Department had under execution water works in five municipal towns and improvements and extensions to the existing water works in seven other municipalities and drainage schemes for three towns. A water-supply scheme in two municipalities, schemes of improvements to existing water works in two towns and a drainage scheme in two other towns were sanctioned for execution. The total expenditure under water-supply and drainage, including the capital charges, was Rs. 23·44 lakhs, of which Rs. 6·63 lakhs were met from Provincial grants and Rs. 3·90 lakhs out of loans advanced by the Government.

Medical relief

The municipalities maintained 55 hospitals and 43 dispensaries for giving medical relief to the public. The number of in-patients treated rose by 1,198 to 30,786, and the number of out-patients by 18,112 to 1,988,640. The

Education

total cost of medical relief was Rs. 7·12 lakhs. There were 972 elementary schools maintained by municipal councils or 57 more than in the previous year. The number of municipal secondary schools also increased from 30 to 35. The total expenditure on elementary education was Rs. 7·52 lakhs, of which Rs. 3·50 lakhs were met from Government grants and Rs. 3·92 lakhs entirely from municipal funds. The total expenditure on secondary education was Rs. 5 15 lakhs, of which Rs. 1·18 lakhs were met from Provincial funds, the net debit to municipal funds being Rs. 0·86 lakh.

Preventive medicine

The expenditure under preventive medicine, which includes conservancy, was Rs. 23·25 lakhs. The closing balance of the year was Rs. 21·66 lakhs.

Debt

The public debt outstanding against municipalities rose from Rs. 30·04 lakhs to Rs. 35·47 lakhs.

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* The statistics furnished exclude those relating to Palni and Repalli which are not available.

MUNICIPAL ADMINISTRATION—CITY OF MADRAS (1921-22)

[*Administration Report of the Corporation of Madras for 1921–22 ; Statistics of British India, Vol. IV, Local Self-Government—Municipalities*]

Finance

396. The total receipts of the Corporation inclusive of the opening balance amounted to Rs. 86·24 lakhs against Rs. 64·69 lakhs in the previous year and the expenditure was Rs. 60·44 lakhs against Rs. 57·18 lakhs. The balance at the credit of the Corporation at the end of the year was Rs. 25·80 lakhs as against Rs. 7·51 lakhs in the previous year. The income from municipal rates and taxes was Rs. 35·94 lakhs or Rs. 1·47 lakhs more than in the previous year. The increase was for the most part due to the revision of assessment under property tax. The incidence of taxation per head of the population was Rs. 6-14-11 against Rs. 6-9-6 in 1920–21. The revenue derived from municipal property and sources apart from taxation was Rs. 5·98 lakhs or Rs. 58,197 more than in the previous year. The grants and contributions from Government amounted to Rs. 10·40 lakhs as against Rs. 5·40 lakhs in 1920–21 and were made up of a contribution of Rs. 40,026 and a special grant of Rs. 10 lakhs for the improvement of the water-supply and drainage works. Miscellaneous receipts amounted to Rs. 6·06 lakhs as against Rs. 4·97 lakhs in 1920–21. The increase was due to the income derived on account of water supplied for non-domestic purposes. The debt at the close of the year was Rs. 125·93 lakhs. A sum of Rs. 1·96 lakhs was paid for the re-payment of Government instalment loans amounting to Rs. 45 lakhs and Rs. 4·91 lakhs for interest on all loans. The sinking funds at the end of the year on account of the several loans, exclusive of the Government instalment loans, amounted to Rs. 33·29 lakhs in Government securities, stock certificates and Madras Municipal Debentures and Rs. 1,405 in cash.

Works

397. The expenditure on works amounted in all to Rs. 27·67 lakhs or 45·78 per cent of the total expenditure as against Rs. 26·24 lakhs in the previous year. Of this sum Rs. 10·36 lakhs or 37·4 per cent were spent on new works, Rs. 15·70 lakhs or 56·8 per cent on repairs and Rs. 1·61 lakhs or 5·8 per cent on establishment, etc. A sum of Rs. 80,841 was spent on

Communications

works such as the acquisition of land and buildings, for widening roads and rounding off corners, construction of culverts and the widening of bridges to accommodate new tram lines. The amount spent on repairs was Rs. 7·06 lakhs against Rs. 5·42 lakhs in the previous year. During the year 61·34 miles of road were re-formed against 52·66 miles of road in the previous year. Five miles, 2 furlongs and 18 yards of unmetalled roads were metalled or gravelled for the first time, 7 furlongs and 6 yards of roads were tarred and 3 miles, 2 furlongs and 184 yards of roads were re-tarred. Repairs were effected where necessary in the case of bridges and culverts. The expenditure on new works was

Buildings

Rs. 67,069 and that on repairs Rs. 42,674. One of the two school buildings which were in progress in the previous year was completed during the year. Flush-out latrines were constructed in several places. Additions and alterations to the existing servants' quarters in the Krishnampet Isolation Hospital were completed during the year. The laboratory behind the Ripon Buildings was provided with electric fittings. The amount spent on drainage works was Rs. 7·24 lakhs and on maintenance Rs. 4·95

Drainage

lakhs. Sewer laying has been in progress in the Georgetown, Purasawakam, Ice House Road and Tondiarpet areas. Owing to the impossibility of obtaining stoneware pipes from England, sewer-laying and house connexions have been very much delayed. The buildings for the three stations at Ice House Road, Napier Park and Purasawakam have been completed and the machinery has been delivered and in most cases erected. The expenditure on water-supply works was Rs. 1·61 lakhs and that on

Water-supply

maintenance Rs. 3·24 lakhs. The quantity of water supplied during the year was 5,061·30 millions of gallons which is equivalent to nearly 26·5 gallons per head per day. The maximum average daily consumption per head in any month was 30·6 gallons and the minimum 22·4 gallons.

During the year 17,860 houses were inspected and 1,663 defects in the service pipes were brought to notice. Six hundred and twenty-six new services were laid by licensed plumbers and 2,323 existing services were repaired, cleaned, altered or extended. The total number of house service connexions in the city on the 31st March 1922 was 31,334. The length of pipes removed, cleaned and re-laid was 1,050 feet and that of new mains laid 12,645 feet. Twenty-seven valves, 23 stop cocks, 25 hydrants and 141 meters were also fixed during the year. There were at the close of the year 1,808 public fountains, 75 cattle troughs and 19 bathing fountains. The quantity of water supplied to the city as measured at Red Hills was 898,017,543 c.ft. as against 882,822,158 c.ft. in the previous year.

Education

398. The expenditure on education was Rs. 1·11 lakhs against Rupees 94,220 in the previous year. The total number of schools at the close of the year was 34 and there were 4,722 boys and 782 girls on the rolls on 31st March 1922, an increase of 15·5 and 23 per cent, respectively, on the previous totals. There were 198 male teachers and 3 female teachers in the Corporation schools and all of them with one or two exceptions were professionally qualified. Of the 34 schools, 28 are held in Corporation buildings and 6 in rented ones. The experiment of providing tiffin to secure continuity and regularity in attendance begun in the Corporation School, Thousand Lights, was successful and the benefit has since been extended to the schools at Mirsapet and Chetpat which are located in very poor localities.

Sanitation and medical services

Medical aid

399. A sum of Rs. 9·18 lakhs or 15·1 per cent of the total expenditure was spent on sanitation and conservancy during the year as against Rs. 8·25 lakhs in the previous year. The cost of maintenance of the Corporation hospitals and dispensaries amounted to Rs. 1·69 lakhs as against Rs. 1·21 lakhs in 1920–21. The total number of patients treated in them was 207,712 against 232,629, which includes 61,598 treated in other dispensaries. The usual contributions of Rs. 20,000 to Government on account of hospitals and of Rs. 15,987 to other medical institutions were paid.

Registration and vaccination

The amount spent on vaccination and registration of births and deaths was Rs. 36,212 as against Rs. 35,914 in the previous year. The total number of cases vaccinated in the city in the calendar year 1921 was 26,991 against 25,074 and the percentages of success in primary vaccination and re-vaccination cases were 93·9 and 35·02, respectively, as against 78·9 and 34·9 in 1920.

Plague

There were in all 4 attacks and 3 deaths from imported plague during the year against 11 attacks and 8 deaths in 1920.

Anti-malaria operations

Owing to retrenchment, the malaria establishment was reduced considerably and the present staff consists of one anti-malarial drain Superintendent and 9 coolies for cleaning drains. The malaria work is at present confined to the cleaning of insanitary public tanks and wells and the reclamation of insanitary tanks, low-lying ground, etc. The reclamation work was done in respect of three tanks, one well and one piece of low land during the year.

Miscellaneous

400. A sum of Rs. 4·25 lakhs was spent on lighting, and the cost of maintenance alone amounted to Rs. 1·30 lakhs. During the year 1,358 new electric lights were installed and 37 were removed. The number of electric lights on 31st March 1922 was 5,434. There were also 1,805 oil lamps. The public parks were maintained at a cost of Rs. 57,480 as against Rs. 90,982 in the previous year. The cost of the maintenance of fire engines was Rs. 34,766 as against Rs. 22,604 in 1920–21. There were 104 fire calls during the year but only 54 cases called for the actual attendance of the engines.

MILITARY—AUXILIARY AND TERRITORIAL FORCES (1921-22)

Military

401. At the end of the financial year 1921-22 the total strength of the twelve Auxiliary Force units in the Presidency and the neighbouring States was 5,923 all ranks, about half of whom were in the "Active" class. The almost prohibitive cost of keeping horses and the growing popularity of the motor led to the conversion of the major portion of the Southern Provinces Mounted Rifles into Motor Patrols; one of these sections did excellent patrolling and convoy work at the time of the Māppilla rebellion. The widespread political disturbances of the year resulted in an abnormal number of calls on the force. The South Indian Railway Battalion and the Nilgiri-Malabar Battalion were employed on various duties in or near the area of the Māppilla rebellion, and the Madras and Southern Mahratta Railway Rifles and the Madras Guards rendered assistance to the Civil power in Madras and other disturbed areas.

402. A satisfactory start was made with the formation of units of the Indian Territorial Force; four infantry battalions and a company of the University Training Corps were constituted. The 1st (Territorial) Battalion, 75th Carnatic Infantry, held their annual training camp which was attended by a large number of all ranks who displayed commendable enthusiasm and keenness.

MARINE (1921-22)

[*Reports of the Madras Port Trust and of the Madras Port Department for the year 1921-22; Statistics of British India, Vol. IV, Local Self-Government—Port Trusts*]

Madras Port Trust

Finance

403. During the year the receipts of the Port Trust on revenue account from all sources amounted to Rs. 25·43 lakhs as against Rs 29·59 lakhs in 1920-21 and Rs. 15·28 lakhs in 1913-14, the last pre-war year, a decrease and an increase of 14·06 per cent and 66·43 per cent respectively. The falling off from the 1920-21 figure was largely due to the abnormal realization during 1920-21 of transit dues on account of imports which had for long lain in the port sheds owing to the financial difficulties of the consignees. Excluding this swollen item, the receipts were Rs. 23·46 lakhs in 1921-22, an increase of Rs. ·47 lakh over the previous figure. If contributions made from revenue surplus to capital, which amounted to Rs. 8·72 lakhs, be left out of account, the gross expenditure was Rs. 20·92 lakhs or 82·27 per cent of the gross receipts. Excluding from working expenses the interest on loans, which amounted to Rs. 5·82 lakhs, the actual working expenses came to 59·38 per cent of the harbour earnings against 48·39 per cent in 1920-21. The harbour dues alone, excluding charges for specific purposes, such as cranage and storage, amounted to Rs. 13·35 lakhs. A sum of Rs. 1·19 lakhs was paid to the Corporation of Madras in respect of property tax. It will be observed that the net result of working for the year has been a profit of Rs. 2·22 lakhs, which does not leave a sufficient margin for contingencies which may at any time arise in a port situated, as Madras is, in an unprotected position, on an exposed coast, and subject to cyclones.

Works

404. The repairs to the north-east sheltering arm, which was damaged during the cyclone in November 1916, were continued and the work has now been completed with the exception of the apron round the head and the concrete capping to the block work. The head, consisting of a steel well caisson, 48 feet in diameter, filled with concrete and a superstructure of concrete block work weighing in all 10,933 tons, was first sunk 37 feet into the sea-bed. The gap of 70 feet and $8\frac{3}{4}$ inches thus formed between the semi-permanent head and the new head was then filled up with nine slices of block work and a wedge of blocks laid horizontally, 9,579 tons of block work exclusive of the head being built into the work. The slice

and wedge work was founded at 40 feet, sea-bed level, on a rubble bed laid in a trench excavated for the purpose. The total cost of rebuilding the northern end of the sheltering arm will be about Rs. 20 lakhs. A further area of 9½ acres of land has been raised by filling to the level of the surrounding yards during the year and brought into use for storing coal. Two thousand and five hundred yards of additional sidings have been laid as the land became available. The steel work for a new customs and medical inspection hall for passengers has been ordered and work on the foundations started. The suction dredger "Madras" worked for 235 days during the year in deepening and maintaining the entrance channel, the major portion of that period having been spent in increasing the depth of the harbour to 32 feet. In order to maintain a depth of 30 feet inside the harbour, 37,250 tons of silt were removed. Sixty-three thousand six hundred and eighty-eigh ttons were removed from Nos. 2 and 3 moorings to increase the depth of water in these berths to 32 feet. The bucket dredger "Triton" has been sold for breaking up.

Trade

405. The total tonnage of goods which passed through the port in the year amounted to 874,080 tons against 848,756 tons in last year and 797,665 tons in 1913–14; imports contributed 660,571 tons and exports 213,509 tons against 717,740 tons and 131,016 tons, respectively, in the previous year. Although the import tonnage was slightly less than in last year, this was more than counterbalanced by the increase in the export tonnage. Of the above total, 870,119 tons was sea-borne against 810,159 tons last year. The imports of rice fell by 66·8 per cent, but there was a slight increase in the imports of other food-grains from 37,846 tons in 1920–21 to 42,693 tons in 1921–22. There was a decrease in the imports of Government stores owing to the stoppage of grain imports on account of the cessation of the war and also in the imports of timber, piece-goods, provisions and beer and wines by about 18 per cent, 37 per cent, 39 per cent and 42 per cent, respectively. With these exceptions, practically all heads of imports showed an increase, notably railway materials, cement and metals (iron and steel) not handled by the Trust. Kerosene oil was imported to an extent of 64,070 tons against 59,091 tons in 1920–21; other mineral oils increased from 28,980 tons to 31,283 tons. The year under review was a record year as regards shipments of ground-nuts, which amounted to 129,455 tons against 100,710 tons in 1917–18, the previous record year. The export of hides and skins showed a slight increase, due to a revival in exports. The freight collected on behalf of the two contiguous railways on the railway traffic amounted to Rs. 25·65 lakhs. The value of private trade in foreign merchandise from foreign ports amounted to Rs. 1,746 lakhs against Rs. 2,129 lakhs in the previous year, while that of the Indian merchandise from Indian ports was Rs. 496 lakhs against Rs. 462 lakhs in 1920–21. The value of Indian merchandise to Indian ports was Rs. 183 lakhs against Rs. 136 lakhs in the previous year and that of Indian merchandise to foreign ports was Rs. 961 lakhs against Rs. 762 lakhs in the previous year.

Minor ports

Finance

406. The receipts of the Port, Marine and Coast Light Funds amounted to Rs. 19·21 lakhs and the expenditure to Rs. 14·90 lakhs as against Rs. 15·92 lakhs and Rs. 13·18 lakhs, respectively, in the previous year. The closing balance consisted of Rs. 10·39 lakhs in cash and Rs. 16·23 lakhs in Government securities, the corresponding figures for the previous year being Rs. 7·08 lakhs and Rs. 15·23 lakhs, respectively. The increase in income from port dues, from Rs. 2·73 lakhs to Rs. 4·01 lakhs, was due mainly to large-sized vessels having been introduced in the service and to the increase in the rates of port dues. The collections from coast light

Trade

dues also increased from Rs. 2·21 lakhs to Rs. 2·73 lakhs. The aggregate value of sea-borne trade of the minor ports of the Presidency was Rs. 58·22 crores as against Rs. 34·87 crores in the previous year. Cochin retained its place as the first of the out-ports in the total value of trade. Eighteen thousand seven hundred and seventy-four vessels with an aggregate tonnage of 5,137,629 tons entered the various outports during the year against 18,376 vessels of 3,874,609 tons in the previous year.

The total number of passengers who arrived at and sailed from the various outports decreased from 474,288 to 436,241. Dhanushkodi continued to return the largest number.

General

407. The Harbour Engineer's Department took charge of all ports and marine works which had hitherto been carried out by the Public Works Department. Schemes relating to improvement works at Tuticorin and Rāmēswaram were under consideration. Preliminary works in connection with the Cochin Harbour investigation were continued. A navigation school was opened at Masulipatam in August 1921, but it had to be closed down for lack of students. The total number of shipping casualties increased from 12 to 17. One boat accident occurred at Baruva resulting in the loss of three lives. There were no weather disturbances of any importance during the year. Coast and port lights were exhibited as usual throughout the year without interruption except for a temporary cessation of the automatic acetylene light at Gopalpur. The working of the Port rules and regulations was satisfactory and the supply of boats was equal to the demand at the several ports.

MORTALITY FROM WILD ANIMALS AND SNAKES (1921)

[*Report on the mortality caused by wild animals and snakes and the measures adopted for the destruction of wild animals during the year 1921; Statistics of British India, Vol. III, Public Health, Deaths from and destruction of wild animals*]

Mortality

Wild animals

Snakes

408. The number of persons killed by wild animals was 840 and by snakes 969 against 783 and 1,119 in the previous year. The mortality was highest in the Agency division and the majority of the casualties were caused, as in the previous years, by tigers. More than 75 deaths from snake-bite occurred in South Arcot, Tanjore, Trichinopoly and Salem. Chingleput, Chittoor, Coimbatore, South Kanara and the Agency have also returned high numbers.

Rewards

409. A total sum of Rs. 18,274 was disbursed in rewards for the destruction of wild animals.

MISCELLANEOUS (1921)

[*Reports on the working of the Indian Arms and Explosives Acts; Return of sulphur licences in force during the year 1921*]

Arms, explosives and sulphur

410. The total number of licences issued under the Indian Arms Act increased by 2,936 to 59,148. The increase was mainly due to the larger number of licences issued during the year, in almost all districts, for carrying arms for purposes of sport, protection or display. Licences issued for the destruction of wild animals doing injury to crops or cattle increased by 132 to 13,415. The number of breech-loading guns licensed rose again from 12,326 to 13,651. There was also an increase (149) in the number of revolvers licensed, the increase being marked in Madras (458 against 277 last year), where it is probable that the labour disturbances and riots induced people to arm themselves. The total number of licences issued under the Indian Explosives Act fell by 2,783 to 8,072 owing to the issue of fewer licences for the possession of explosives for blasting wells, etc. There were 534 prosecutions under the Arms and Explosives Acts of which 448 resulted in conviction, giving a percentage of 83 against 81 per cent in the previous year. The number of sulphur licences granted fell by 17 to 276, and there was also a fall in the quantity for which licences were obtained (702 tons against 1,072 tons in last year). There were no cases of illicit manufacture of fire arms during the year.

CHAPTER IV

PRODUCTION AND DISTRIBUTION

AGRICULTURE (1921-22)

[*Report on the operations of the Department of Agriculture, and the Administration Report of the Civil Veterinary Department, for the year 1921-22 (G.O. No. 1278, Development, dated the 25th September 1922); Agricultural Statistics of India, Vol. I, British India*]

General

411. During the year, seven appointments on probation, which included those of a Lecturing Chemist and a Millets Specialist, were made to the Indian Agricultural Service,—all being conferred upon Indians in consonance with the policy of Indianizing this service—and five to the Madras Agricultural Service, all except one in either case being by the promotion of officers already in the Department. To the non-gazetted executive staff, ten upper and eighteen lower subordinates were appointed on probation. An additional Inspector of offices was sanctioned temporarily for one year to meet the expanding work. The touring of officers and the building programme were greatly hampered by the financial shortage. Sanction, preliminary or technical, was accorded for the construction of quarters, mainly for officers and staff, at Coimbatore, Trichinopoly, Madras and Nandyal. Fair progress was made in the construction of the new Teaching College and residential quarters at Coimbatore. Certain minor works at the Burliyar garden and the Koilpatti farm were completed by the Public Works Department, while a number of works, including buildings at Taliparamba and Coimbatore, which were undertaken departmentally, were satisfactorily completed during the year. The Manganallūr, Bantanahal and Sirvel experiment stations were closed down. The opening of a dry-land farm in Guntūr for the study of "Coconadas" cotton and tobacco was sanctioned and rapid progress has been made. A paddy-breeding station was opened at Aduturai in the Tanjore district for testing improved strains of paddy in the Tanjore delta in prosecution of the work of the Manganallūr station. Land north of the Central Farm, Coimbatore, was acquired for a cotton-breeding station and coconut station No. 1 in the Kasaragod taluk was extended. The preliminaries to the affiliation of the Agricultural College, Coimbatore, to the University of Madras and the institution of the B.Sc.Ag. degree were completed and sanctioned in April 1922. Publicity was given to the activities of the department by the publication, starting in January 1922, of a monthly digest in English, Tamil, Telugu and Malayālam. The season was on the whole unfavourable. The south-west monsoon was generally heavy, though late in the Circars and in the south, and badly distributed on the West Coast, while the north-east monsoon was likewise a failure with little rainfall after November. The early advent of the hot weather caused the premature bursting of cotton bolls in the "westerns" tract, with the result that the cotton crop was below normal and of unusually weak staple.

Season and rainfall

Agricultural research and experiments

Sugarcane

412. Varietal tests in sugarcane were carried out on the agricultural stations and in co-operation with local cane growers. These have proved the superiority over previous importations of J. 247 in the Circars and in Kurnool district and of the variety Java (Hebbal) in South Arcot and on

the West Coast. At Anakapalli, the application of fish guano at one ton per acre gave 736 lb. of jaggery more than a similar application of 4,000 lb. of wild indigo and half a ton of guano. A satisfactory method of propping canes by substituting galvanized wire for bamboos was evolved at the Central Farm, Coimbatore. The Economic Botanist continued his work of raising and testing improved strains of paddy, coupled with the study of inheritance of characters and the crossing of different strains. Selection work also was done by him at Coimbatore and this and varietal tests, by the Deputy Directors at Samalkōta and Pālūr. Owing to the liability to drought of the present short-duration second crop in the Gōdāvari delta, trials have been made, with most encouraging results, in growing a short-duration variety first followed by a long-duration one in the second crop season, as is the practice in the southern rice districts. Experiments with Trichinopoly phosphate proved that where the soil already contained less than 0·01 per cent of phosphoric acid, the application of phosphate gave on the average a decided increase of 11 per cent of grain. The surveys of the Periyār area and the Gōdāvari delta indicated a deficiency in phosphates and nitrogen, marked in the Periyār area but much less so in the Gōdāvari than in the other deltaic areas. Manurial experiments conducted at Samalkōta to test the availability of phosphate in bone-meal when applied in conjunction with green manure showed that only a soil of poor fertility gives a marked increase, while those conducted on the heavy deltaic soils at Manganallur point to the effect of phosphate being slow unless the physical texture of the soil admits of the proper fermentation of the green manure. The highest increase, alike in green (87 per cent) and straw (143 per cent) followed the application of super-phosphate *plus* oil-cake. Cultural experiments carried out at Samalkōta showed the unexpected, but inconclusive, results that light seed produced a heavier yield than heavy seed and that thin-sown seedlings gave an increased yield of 12 to 13 per cent, as compared with those raised in a thick-sown seed-bed. The Cotton Specialist continued his selection work on Cambodia cotton and the study of the inheritance of characters of crosses. An investigation of the causes of bud and boll shedding carried out in collaboration with the Entomological, Bacteriological and Botanical sections of the Research Institute, revealed the infection of immature bolls by *Ragmus Morosus Miridæ* and possibly by other sucking insects. Considerable variation in the amount of stem-weevil (*Pempheres affinis*) infection was noticed, and one of the selections of Cambodia cotton was found to be much more immune from attack than the rest. Work on the incidence of boll-worm was continued and it is gratifying to note that "pink-boll-worm" infection has shown a remarkable diminution. The American boll-worm (*Chloridea obsoleta*), known in India as the "Bengal-gram caterpillar" and another boll-worm, at present unidentified but resembling the red boll-worm of Africa, have made their appearance and, if they came into pest conditions, would be a serious menace to the cotton crop. This emphasises the necessity for the continued enforcement of the Pest Act to combat these pests. The Agricultural Chemist prosecuted his investigations as to how far the plant-food available in the soil is responsible for the quality of cotton. Research was also carried on by the Deputy Directors of Agriculture, III and VI circles, in the agricultural stations under them. In the yield tests to compare H. 25 with the local mixture made at Hagari, which lies in the "Westerns" cotton tract, the former gave an increased yield of 34 per cent. At Nandyal, the selected seed of "Northerns" cotton so far distributed to the ryots gave a higher yield of *kapas* than Gadag cotton, Co. No. 2 or Co. No. 3, and also a better ginning percentage. At Koilpatti, several of the recent selections have shown, not only a marked superiority in yield, but a considerable superiority in their spinning qualities to those already given out to ryots for cultivation. At Ānamalai, No. 15 Cambodia cotton yielded over 43 per cent more than the local cotton. The newly appointed Millets Specialist has so far devoted his time to visiting the most important cholam (Sorghum) areas

Paddy

Cotton

Dry grains

for field inspections and laboratory research. The complete failure of this crop in 1919–20 rendered comparative tests of his different selections impossible at the Hagari station, while such tests made at the Nandyal station have again proved that T-I is the heaviest cropper, giving an increase of nearly 15 per cent.

Coconuts

The wonderful change in the condition of the plantation at the Kasaragod coconut station is amply evidenced by the steady increase in the number of trees in bearing from 907 in 1918–19 to 1,164 in 1920–21 and of the yield of nuts from 28,886 to 53,310 in the same period. The analyses of different parts of the coconut tree at each stage in its growth made by the Government Agricultural Chemist clearly showed the important part played by phosphate and potash in the physiological processes of the tree. A series of experiments were made to test the manurial requirements of the coconut and preliminary trials were made with the use of manures. Experiments were also conducted in tapping trees and in the manufacture of coconut jaggery and frequent analyses were made of the juice of a large number of trees in order to ascertain the variation at different seasons and stages of growth and in tapping individual spathes. At the three coconut stations planted in 1919–20, excellent results were obtained by the method of surface planting in lieu of the usual local practice of planting in deep pits and by the maintenance of a soil mulch for the whole area which enables the trees to maintain their vigour throughout the dry seasons. An outbreak of bud-rot was reported in North Malabar and steps were taken to destroy the affected trees.

Fruit culture

The Coonoor Pomological Station was fully planted up with varieties of fruit trees and some of the apples, peaches, Japanese plums, quinces, figs and persimmons are already fruiting. A satisfactory beginning was made towards developing the fruit industry and at the close of the year more than 1,600 grafted fruit trees were ready for sale to the public. The cape gooseberry was found to be a most profitable catch crop and a large quantity of the seed of this and of the ordinary tomato was offered for sale to the public. Plantain experiments have revealed methods for improving the crop in the better drained areas of the Gōdāvari delta. The pine apples grown at the Taliparamba station promise to provide a profitable industry for the West Coast. Very fine fruits, of varieties such as Kew and Cayenne, some of them weighing over ten pounds, have been produced.

Miscellaneous crops

The pepper crop failed completely at Taliparamba owing to an unfavourable season. Out of the 32 varieties of potatoes tested at Nanjanad (the Nilgiris), three of those received from Australia proved the heaviest croppers, but the individual potatoes were too large and the "eyes" too deep to suit the Indian market. Extended trials with elephant grass (*Pennesetum purpureum*) at the Central Farm showed that it is a valuable addition to the existing fodder crops as it has given double the yield of green fodder as compared with Guinea grass.

Live stock

The work of improving the Ongole breed of cattle was continued at the farm established at Chintaladevi where a herd of this breed is being gradually collected. The experiments for improving the Madras milk supply by the importation of pedigree Ayrshire bulls of known milking strain proved a failure. The temporary buffalo-breeding station at Samalkota was closed down as the bulls, despite the best attention paid to them, did not grow into good large animals. It is, however, gratifying to note that the breeding bulls at the agricultural stations are becoming exceedingly popular. A survey of the chief localities where buffaloes are kept for dairy purposes was undertaken.

Scientific research and experiments

Chemistry

413. The Chemistry section analysed 554 samples during the year besides making a very large number of analyses consequent on the researches carried on in the laboratory. In addition to the research work connected with crops already referred to, experiments were carried out in the utilization of calcium cyanamide and its mode of decomposition in the soil and the by-products formed under South Indian conditions. The results obtained generally confirm those in Europe. Experiments and researches were continued to ascertain the rate at which

different oil-cakes become available in Madras soils and the conditions of malting cholam which would yield a high extract and would therefore be suitable for brewing. Some interesting work was done in testing the ripeness of cane and the most suitable stage for cutting. A scheme of experiments on the storage of farm-yard manure was drawn up in collaboration with the Bacteriological section and the Deputy Directors of Agriculture, with a view to devising a method which is not costly and which will reduce the loss of plant-food to a minimum. A well-rotted manure was prepared from paddy straw by the use of nitrolim with a loss of less than 10 per cent of the nitrogen. The work was extended to prickly-pear and other waste products. Experiments were also projected on the improvements in chemical analyses of soils and the methods of estimation of potash. Reference has already been made to the investigation into the cause of the premature fall of cotton bolls and the suspected insect agency responsible for spreading the disease. It is possible that an insecticide rather than a bactericide will be required to control this disease. Investigation was also undertaken to test the value of ammonium sulphate as a manure for cotton, but the results obtained have not borne out the experience of the Central Provinces. The soil analyses carried out in order to ascertain the fluctuation in nitrogen content in different soils at different seasons of the year indicate that, no matter what the locality may be, the maximum nitrogen fixation occurs during the hot weather, diminishes through the monsoon and reaches a minimum in the cold weather.

Bacteriology

414. M.R.Ry. Rao Bahadur K. Ranga Achariyar's *Hand-book of Some South Indian Grasses* and the second edition of his *Manual of Elementary Botany* were published during the year, while considerable progress was made in studying the weeds on agricultural land.

General Botany

415. The work of the Entomological section has been dealt with under the major crops already described. Considerable systematic work was done and a very large number of insects were identified by various specialists. The Government Entomologist specially engaged himself in studying the *Miridæ*. The increased interest evinced by the public in the work of this section is evidenced by the receipt of some 200 reports of damage, mostly to paddy and cholam, caused by pests for which remedial measures have been suggested.

Entomology

416. In addition to the work on diseases of paddy and sugarcane already referred to, cotton wilt and cholam disease were under observation. The Rubber Mycologist has been investigating many diseases affecting rubber, e.g., the secondary leaf-fall, the die-back of shoots of young rubber, patch-canker, stripe-canker and brown bast. Investigations into the shedding of leaves have established the fact that trees previously considered to be resistant to disease are severely attacked, though they do not shed their leaves. Much work of an agricultural nature was also done in order to improve soil sanitation, etc. Experiments in tapping rubber in order to reduce the cost of the operation and to ascertain the relative yields in tapping, both morning and evening, were conducted with results which have caused a great saving to many estates, which have thus been enabled to carry on when otherwise they would have had to close down owing to the prevailing slump in rubber prices. A process has been discovered whereby rubber can be directly vulcanized from the latex, which may prove of considerable commercial importance. The work of the Sericultural Section was hampered by lack of funds. The seed obtained from cocoons reared at the Coonoor silk farm was found not only to give more silk but to command a higher price owing to its better quality. Notable improvements were made in the rearing of silk-worms in Kollegal. In reeling silk, the importance of changing the water frequently to give better lustre to the silk and regulating the number of cocoons to produce even thread was demonstrated. Considerable attention was also paid to the disposal of silk waste, which, if kept clean, commands a good price. The cultivation of mulberries and silk-worms

Mycology

Sericulture

was so successfully introduced in Bellary district that arrangements have been made to extend it and to teach the rearing of worms and the reeling of silk.

Aid to the public

Operations against disease

417. The Pest Act was applied to Cambodia cotton in five taluks each of the Salem and Trichinopoly districts, in the Coimbatore district, exclusive only of the Kollegal taluk, and in the whole of the Madura district. The usual propaganda was carried out by means of posters, lantern lectures, and demonstrations at important centres, including jamabandi camps. There was, on the whole, little difficulty in having the crop removed by the appointed date. There are signs that the pink boll-worm is decreasing in numbers. The high quality of cotton of this year is largely due to this unpopular measure. The Pest Act was in force for the second year to eradicate the bud-rot of palmyra palms in the Kistna and Gōdāvari districts and in parts of the Guntūr district and the Agency division, the operations being carried out by a special staff. There were no claims for compensation and the Act worked on the whole smoothly. It is gratifying to note that in some cases action was taken *suo motu* by tree owners. Bud-rot showed a marked decline during the year, particularly in the Gōdāvari district. A serious recrudescence of the *mahali* disease of arecanuts which broke out in South Kanara district, called for the assistance of the department, although garden owners were fully conversant with the prescribed remedial measures. The sale of copper sulphate for treating sorghum seed as a preventive against smut, the control of rice hispa, and the prevention by spraying of turmeric and vine diseases were widely demonstrated. Line-planting of sugarcane in Vizagapatam district and improved methods of jaggery manufacture both in that and in Bellary district were demonstrated, while demonstration plots of Java 247 were established on ryots' lands in eight new centres in the Ganjām and Vizagapatam districts. Close upon 100,000 setts of Java and Barbados varieties were distributed from the agricultural stations in the I Circle, including over 90 per cent of Java 247, which is very disease-resistant and adaptable to different soil conditions. There was a considerable extension of the area under improved varieties of cane in Aska and Cuddalore taluks. The department distributed 125,000 setts. Trench-planting was successfully demonstrated near Gudiyattam in the North Arcot district. The use of the economical Sindewahi furnace was more widely appreciated. In the I Circle, Cambodia cotton was grown by ryots under careful departmental supervision. The failure of the season seriously checked the progress of cotton work in the "Northerns" and "Westerns" areas, but it was possible nevertheless to distribute on credit 130,000 lb. of H. 25 seed, sufficient to sow some 13,000 acres, in the Bellary district, both to seed unions and private growers. In the Kurnool district, the area sown fell to 50 per cent of the normal on account of the unfavourable season, though the popularity of N. 14 seems now to be established. There was a slight increase in the area brought under drill cultivation, the bulk of which, it is encouraging to note, was done by the farmers without any departmental assistance. "Pulichai" cotton made its appearance again during the year and in places large areas had to be re-sown with whatever seed people could obtain. The cotton dealers in Tuticorin have at last realized the advantage, both to themselves and to the growers, of cultivating pure Karunganni for its ginning qualities as compared with Uppam or a mixture of both varieties. Forty thousand pounds of Karunganni seed imported from the Tinnevelly tract were sold in the Coimbatore district, where this cotton is now fairly established. Taking the whole work of cotton improvement in the Presidency, it has more than paid for itself. The department distributed during the year over 54 tons of selected strains of paddy seed, sufficient to transplant over 6,700 acres of wet land. This, at first sight, may appear insignificant considering that there are over 11 millon acres under rice in this Presidency ; but this work has been going on for several years and a very large proportion of the crop raised from this seed is reserved for seed purposes, and each acre of land grown

Crops

with such seed may be estimated to supply seed sufficient to sow some 120 acres. The work of popularizing the use of green manure grown on wet land after the harvest of paddy still occupies a prominent place in the district work of the department. The cultivation of Dhaincha received a serious check in the IV, V and VIII circles owing to the early setting in of the rains resulting in the ploughing in of the crop before it had set seed, and seed had to be obtained at a high cost from Bengal. This manure is finding favour with the agricultural population in the Gōdāvari and Kistna districts where it is replacing teegapesalu and sunnhemp. An experiment has been projected to see how far it is possible to raise the seed on dry lands which, if successful, will solve the present difficulties in regard to the supply of seed. The practice of growing kolinji as a green manure crop is becoming increasingly popular, especially in the Cauvery delta, the Periyār area, and the ayacut of the Bhavāni river, and about 144,000 lb. of seed, sufficient to sow 16,000 acres of land, were sold by the department. About 12,000 lb. of the sunnhemp were also distributed by the department. In the Planting districts, the use of green dressings and cover crops is becoming a regular practice as a result of the operations of the department and is replacing the more general system of clean weeding which leads to loss of soil by erosion during the monsoon. The chief requirements of our wet lands being phosphates and nitrogen, the necessity for utilizing the available concentrated manures for rice cultivation is now being forced upon the country ; and, as a result of research carried out at the agricultural stations and by the agricultural chemist at Coimbatore, it has been ascertained that phosphatic manures such as bone-meal and Trichinopoly phosphate become much more readily available when applied in conjunction with organic manures like green-manures and oil-cakes. Two difficulties which beset progress in the manurial propaganda of the department are, first, that a farmer, though (naturally) he likes to see a very marked increase in the yield by the application of the manures, is often so uneducated that he is unable to work out the resulting profit and loss. It has, therefore, been necessary to advocate the use of expensive manures such as fish guano which are capable of giving an improvement and increased yield which the farmer can actually see. Secondly, especially in the south, large areas are farmed by the agents of absentee landlords. For instance, the greatest success of the Tanjore manure mixture has not been in the Tanjore delta proper, but in the Lalgudi taluk of the Trichinopoly district where a much larger proportion of the area is directly farmed by the owner of the land, who really appreciates the use of such manures. The large increase in crops arising from the after-treatment given to coconut trees, which is adopted at the Coconut station, in lieu of the practice in vogue hitherto of giving no further attention when the trees were once established, is being demonstrated to the cultivators of South Kanara district.

Cattle and poultry shows

418. The twelfth Cattle and Pony Show was held at Tiruppūr from the 23rd to the 25th May 1921 and opportunity was taken of this to carry out propaganda work by means of exhibits of crops, manures, insects and implements and by delivering lantern lectures on the benefits of green manures, the improved breeding of cattle, the application of the Pest Act to Cambodia cotton, the fungoid diseases of important crops, and the use of the Agricultural College to ryots. The various process of the silk industry from the egg to the woven cloth were exhibited and silk-worm rearing and silk reeling were actually demonstrated. The usual poultry show was held at Ootacamund at which the Central Farm won prizes for its exhibits.

Agricultural engineering

419. None of the motor tractors owned by the department were found to be of much use as they are too light and low-powered and not strong enough for the deep ploughing required in black cotton soil. One of them, the "Fordson," is much too extravagant of fuel and oil and is also dangerous. Adequate structural alterations have not yet been made in tractors which will render them suitable for Indian

conditions. The Agricultural Engineer has thus been set free to devote more time to his legitimate duties of investigating the possibilities of improving the indigenous implements for cultivation. He is at present engaged on improvements of the country plough, the seed drill, and inter-cultivation implements.

Statistics

420. The usual forecasts of the important food and industrial crops were issued during the year. The issue of a fifth forecast of cotton in April was sanctioned. There is an increasing demand for these forecasts not only from within the Presidency but from outside, which shows the growing reliance placed on them by the trade, which has also repeatedly acknowledged the value of the weekly returns of raw cotton published by the Department.

Finance

421. The receipts and expenditure of the Department during the year stood at Rs. 3·64 lakhs and Rs. 13·86 lakhs as against Rs. 3·42 lakhs and Rs. 12·92 lakhs, respectively, in the previous year.

Civil Veterinary Department

422. The department consisted of a Chief Superintendent, a Divisional Superintendent, 4 Deputy Superintendents, 18 Veterinary Inspectors and 161 Veterinary Assistants. Thirteen new appointments for touring work were created and twenty-six new graduates were entertained during the year. Two new Inspectors' ranges were created with headquarters at Coimbatore and Trichinopoly and six new dispensaries were opened. Most of the hospitals and dispensaries showed an increase of work, but in seven of them there was a fall, due to the introduction of fees, the levy of tolls under the District Municipalities Act, scarcity of fodder, plague, etc. The number of castrations performed at veterinary institutions, excluding the Madras Veterinary College, fell slightly from 2,648 to 2,617. The number of in-patients and out-patients treated were 72,969 and in 14,323 cases medicines were supplied to non-attending patients. The touring staff inoculated 70,815 animals, treated 42,837 contagious and non-contagious cases and castrated 6,809 animals. The reported total mortality from contagious diseases dropped from 37,066 to 34,258, the largest decrease occurring under Rinderpest and Anthrax. There were 3,304 convictions under the Prevention of Cruelty to Animals Act in the Presidency excluding the City of Madras. In 732 cases the animals concerned were sent to veterinary infirmaries for treatment which is a slight improvement on the percentage of cases sent last year. The total number of students at the Madras Veterinary College on the 31st March 1922 was 93. The college produced satisfactory results but the percentage of passes was less than that of 1920–21. The number of cases treated at the College Hospital was 2,806. The total receipts and charges of the department for the year were Rs. 0·18 lakh and Rs. 4·24 lakhs, a decrease and increase respectively of Rs. 6,000 and Rs. 76,000.

WEATHER AND CROPS

(FASLI 1331—1ST JULY 1921 TO 30TH JUNE 1922)

[*Season and Crop Report for fasli 1331; Agricultural Statistics of India; Estimates of area and yield of principal crops in India*]

Rainfall

423. The south-west monsoon on the west coast and on the hills was irregular and insufficient in June and July, but the situation was improved by good rains from about the end of July to the first week in September when the monsoon lessened; on the whole the rainfall was about the average. The rainfall in June was normal in the Deccan and above normal in the central and southern districts; most of the rain fell in the first week of the month. The excessive heat in May and the failure of early rains affected the yield of gingelly and sugarcane in Vizagapatam. Rains in July were received mainly in the first half of the month; they were generally above normal and well distributed. The rainfall in August was above normal except in Ganjām, Vizagapatam, Guntūr, the Deccan and Nellore. Sowings were very satisfactory in June, July and August, except in the south, where river freshes were low and wet cultivation was retarded in consequence. Rains in September were received only in the second week in the Deccan and the central and southern districts and were below normal; in the Circars, the rainfall in the month was well distributed and above normal. Owing to the poor rainfall in the Deccan in August and September, there was a considerable decrease in the area under cotton and castors and the yield of dry crops, especially groundnut, was affected. On the whole, the rainfall in the south-west monsoon was generally greater than the average except in Kurnool, Bellary and Anantapur; it was also generally greater than last year throughout the Presidency. The total area cultivated was therefore above the average and greater than last year. The situation in the Deccan was improved by the heavy rains of October which fell throughout the Presidency, especially in the second week of the month, and were fairly well distributed, with a break in the third week. The rains were beneficial to white cholam and castors in Bellary, though they adversely affected the yield of sugarcane. Sufficient supplies of water were received in the irrigation sources throughout the Presidency and sowings in the month were satisfactory. Rains continued till the 5th of November after which they ceased. The rainfall in this month was generally below the average except in Kurnool, Bellary and Anantapur. There were no rains in December until the 28th. Standing crops began to feel the effect of the continued drought, especially paddy in South Arcot, Chittoor, North Arcot, Trichinopoly and Tanjore, and gingelly in the Circars and South Arcot; the dry weather prevented the complete collection of the groundnut crop in South Arcot and North Arcot. The rains received towards the close of the month improved the situation in Chingleput, South Arcot, Trichinopoly and the south. The total rainfall during the north-east monsoon was generally below the average except in the Deccan, and below last year except in the Circars and the Deccan. The area sown during this period fell below the average. The rains in the first half of January in the Carnatic and the central and the southern districts proved generally beneficial to the standing crops. The dry weather conditions that prevailed in the latter half of January, February and March facilitated the harvest of paddy. Hot weather conditions set in very early in the Deccan and had a disastrous effect on the cotton crop which had been sown late on account of the failure of the south-west monsoon. The soil began to crack and there was a heavy shedding of young bolls and flowers and even such cotton as had set was unable to develop its staple properly. The absence of the March showers had a bad effect on the summer flush of cotton in Rāmnād and Tinnevelly. The cotton crop, however, improved on account of the thunder storms in the second half

of April. A certain amount of anxiety was felt on account of the lateness of hot weather thunder showers in the central and southern districts, but fortunately these came by the middle of May. The May rains on the west coast were very good and the paddy crop had an excellent start.

Crops

424. The year, on the whole, was not unfavourable to agricultural operations except in parts of Ganjām, Vizagapatam, Kurnool, Bellary, Anantapur, Nellore, South Arcot, North Arcot, Tanjore and Tinnevelly. The area under cultivation exceeded the normal by about 4 per cent, and was the same as last year. Test works and kitchens were started in the Kurnool, Dhone and Pattikonda taluks of the Kurnool district. Famine was declared in the taluk of Kurnool in the first week of November 1921, but the relief works were closed by the end of the next month as actual conditions of distress did not prevail. After the close of the harvest season, however, the labouring classes found it difficult to obtain employment, as the early crops of the year had partially failed and as the outturn of the late crops was below the normal. Test works were again opened in the taluk in the beginning of May 1922 and they were continued till August 1922 when the season improved. Relief works were opened in the taluks of Bellary, Siruguppa, Adōni and Ālūr of the Bellary district and in the Gooty taluk of the Anantapur district in the middle of March 1921, and they lasted for about a year. For want of timely and adequate rains and on account of the insufficient supply of water in the irrigation sources in parts of Ganjām, Vizagapatam, Gōdāvari, Guntūr, Bellary, Anantapur, Nellore, Chingleput, North Arcot and Salem, seasonal remissions had to be granted to some extent. Postponement of the collection of kists beyond the fasli was also found necessary in parts of Ganjām, Guntūr and Anantapur. The areas under paddy, cumbu, gingelly, castor, cotton and tobacco showed a decrease and those under sugarcane, indigo, cholam, ragi and groundnut an increase. The outturn of crops was generally below the normal.

HORTICULTURE (1921-22)

[*Report on Government Botanic Gardens and Parks, the Nilgiris; Report of the Agri-Horticultural Society of Madras; and Report on the Government Cinchona Department, Madras*]

Government Botanic Gardens and Parks, the Nilgiris

425. The season was on the whole favourable from a horticultural point of view. The rainfall was light, but well distributed : frosts commenced early, but were not severe and little damage was done to plants. The Government Botanic Gardens and conservatories were kept in good order and some improvements were effected. The nurseries were replanted and stocked with young plants. Some comparatively rare trees and shrubs, including many species of pine, the seeds of which were obtained from America and elsewhere, were propagated. No progress was made in the cultivation of medicinal plants as the Kew Gardens were unable to supply all the seeds required. A number of seedlings of lavender were raised from seeds collected in a garden at Kodaikānal. This is interesting as it is the first time that lavender has been known to produce fertile seeds in Southern India. The Government Parks were improved and many useless or dead trees were cut down. Certain trees, shrubs and climbing plants new to Sim's Park, Coonoor, were put out in suitable positions in that Park. The staff of the Burliyar Experimental Garden was employed in irrigating, revetting, manuring, pruning and cutting down useless trees and shrubs throughout the year. The mangosteen crop was a record one and a sum of Rs. 1,309 was realized by the sale of the fruit as against Rs. 436 last year. In the Kallar Experimental Garden large numbers of seedlings of fruit trees such as pomeloes, oranges, guavas and mangoes were potted and grown for grafting purposes. The sapodillas fruited well as usual, but there was only a small crop of oranges

and the mango crop was a failure. Wild animals as usual did much damage to the plants. The receipts in all (excluding flower and vegetable seeds to the value of Rs. 247-14-0 supplied to the Soldiers' Gardens) amounted to Rs. 10,249-14-3 and the expenditure to Rs. 41,545-7-1 as against Rs. 6,967-3-2 and Rs. 44,376-11-5, respectively, in 1920-21. The two Ayrshire bulls belonging to Government which were stationed at the Military Dairy Farm, Bangalore, and the Central Farm, Coimbatore, were transferred to Ootacamund and stalled in the Government Gardens for breeding purposes. Ten tons of fish guano were obtained from the Agricultural Department and sold to cultivators.

Finance

Miscellaneous

426. The eighty-third annual exhibition of flowers, vegetables and fruit, and the annual competition for the best kept garden were held in February 1922. Correspondence with botanic and other public societies, planters and the general public was maintained and sales and exchanges were effected. Information regarding the cultivation of fruit trees, vegetables, ornamental and flowering plants and grass lawns was given to inquirers. The supply of class material for the local colleges and schools and of specimens to students and visitors was continued as in previous years. The receipts from cut flowers and floral work fell from Rs. 2,495-11-6 to Rs. 2,263-14-6. Several thousands of annuals were raised and distributed among members and sold to non-members. The extended *Rosarium* was maintained and almost entirely met the local demand for flowers, wreaths, crosses and bouquets. Of the fruit trees the *Grewia Asiatica* and *Ficus Carica* bore fruit during the year, but there was no improvement in its quality. The amount realized by sale of the produce of the experimental country vegetable plot fell from Rs. 272-8-0 to Rs. 256-10-9. The income of the Society for the year from all sources excluding Government grants amounted to Rs. 12,454-10-8 or Rs. 722-0-4 more than last year.

The Agri-Horticultural Society, Madras (1921-22)

427. The rebuilding of the Quinine Factory at Naduvattam which was nearly destroyed by fire in 1919 was finally completed by the Public Works Department during the year, and opportunity was taken to introduce more economic methods of working than had formerly obtained. The factory is capable of an output of about 40,000 lb. of Quinine Sulphate; the production in 1921-22 resulted in an addition to stock of 31,410 lb. of Quinine Sulphate, 2,256 lb. of Quinine Hydrochloride and 13,075 lb. Cinchona Febrifuge. Owing to the enhanced market price the sales were smaller than in previous years, amounting to 21,520 lb. of Quinine Sulphate, 1,049 lb. of Quinine Hydrochloride, 100 lb. of Quinine Bi-hydrochloride and 9,220 lb. of Cinchona Febrifuge. Besides this 6,000 lb. of Quinine Sulphate were sold for the Government of India from their reserve stock housed at Ootacamund. The total receipts amounted to Rs. 14,64,167 of which Rs. 2,88,474 represented sales from the Government of India stock. The Cinchona plantations maintained by the Department form a reserve against the time when bark will be unobtainable in the open market and it is feared that within a year a substantial harvest will require to be taken from the reserve owing to the almost complete failure of the local market. The policy to be pursued in the future is under the consideration of Government, and it is hoped that a satisfactory solution of the difficulty of keeping the factory fully employed will be arrived at. An investigation is being undertaken by the Surgeon-General in order to establish for South India the therapeutic efficiency of Cinchona Febrifuge which has received medical support as a specific for benign tertian infections.

Government Cinchona Plantations (1921-22)

FISHERIES

(1ST JULY 1921 TO 30TH JUNE 1922)

[*Administration Report of the Department of Fisheries for the year ending 30th June 1922*]

General

428. In addition to his administrative work, recently increased by the abolition of the post of Marine Biologist, the Director of Fisheries published notes on the Norwegian and Danish fisheries and a hand-book on the "Common Molluscs of South India," re-wrote his report on the Mannar pearl-banks and prepared three papers for the Indian Science Congress. His touring included visits to the southern chank fisheries, the western sardine and mackerel areas and the Chaliyam canning factory. The advice of the department was sought on several occasions by other Governments, including those of Mauritius, Bengal and Travancore.

Marine fisheries

429. Taken all over, the season was far from favourable. Sardines were abnormally scarce as in last season, although the supply of mackerel showed a slight improvement on last year.

Canning

The Chaliyam cannery showed a fair profit on the season's working and the output was an improvement on the previous year; further extensions in the buildings are essential if the output is to expand to any extent. Sardines and mackerel-in-oil are apparently the most popular form of tinned fish with the general public. The total sales almost reached the output figure, owing to vigorous advertisement in the Press; but for the increase in freightage and postal charges, the sales would have been even more extensive. Steps have been taken to bring the quality of the Madras products to the notice of the British authorities. The cannery brought in a profit of Rs. 7,081 as compared with last year's loss of Rs. 1,879.

Curing

The close proximity of the centre of the Māppilla rebellion had a retarding effect on the activities of the Tanur experimental station, but the operations resulted in a net profit of Rs. 1,070 as against a small loss in last year. Mackerel moist-cured with "korrakapuli" proved to be a profitable line of manufacture. The total weight of sardines dealt with in the production of oil and guano was almost double last year's figure, but was still barely one-fifth of the 1919-20 figure, an indication of the state of the supply in those years. The whole output of guano was consigned to co-operative societies for the use of their members. In spite of the comparative failure of the first experiments, there is room for hope that further research will show that the best quality of sardine oil may be a cheap and useful substitute for cod-liver oil. Trial proved that the natural treatment of guano by sun-drying is much more economical than any artificial method, at least in the case of small manufacturers. Satisfactory progress was made in the preparation of fish meals as a food for cattle, poultry, etc., and very favourable reports were received from those who used these meals. The dearth of sardines resulted in a decrease in the number of private oil and guano factories, whose existence was not helped, in some cases, by the imposition of double licensing fees by both taluk boards and municipalities. There are now ten public fish-curing yards under the control of the department; the output was adversely affected by the rebellion and the sardine scarcity. The curers have at last been persuaded to turn to the construction of permanent and more sanitary sheds.

Oysters

Early rains and the shifting of the lake bar considerably shortened the oyster season at Pulicat, but the sales were, in proportion to the length of the season, better than those of 1920-21, which itself was an unusually good year. The receipts and charges almost balanced.

Pearl and Chank fisheries

The state of the pearl and chank fisheries was far from satisfactory, and the Director is preparing a scheme for the complete re-organization of this branch. The recruitment of divers has been proving very difficult. The Decca Conch-shell Workers' Co-operative Society took up the purchase of the shells fished at Tinnevelly and Rāmnād, and thus middlemen's profits have been eliminated to the great benefit of the

workers. There was a marked fall in the amounts offered and accepted for the leased fisheries, due to heavy losses in the past. The bêche-de-mer fisheries, an offshoot of the chank industry, showed a small profit. The pearl fisheries were quiescent during the year, and the cost of establishment was a heavy drain on the department; but the Director contemplates the possibility of a fishery off Tuticorin in 1928 or 1929. Attempts to introduce Malabar canoes among the fishermen of Madras and Negapatam were of no avail, and the Negapatam catamaran was proved to be the best type of craft for local use. The attendance of rural visitors at the Madras Aquarium fell off appreciably, but the display continued to be a very popular resort with the city population, and a substantial profit was secured. A close biological study of the oil-sardine and the mackerel has been taken in hand, and already important observations have been made of the movements and spawning of the shoals. Interesting facts relating to the habits of the flying-fish have been brought to light. The widespread demand for specimens from the supply section shows that this branch is of imperial utility.

Aquarium

Research

430. Notwithstanding the efforts of the non-co-operators, the rentals of inland tanks were highly satisfactory, the year's profit being over Rs. 13,000. The increased efficiency of the trained officers led to an improvement in the stocking of tanks. For this purpose carp, pearl-spot, mullet, and *catla* were mainly used. Four fish farms were run by the department. The Sunkesula and Ippur farms suffered from a shortage of water. Three new farms at Mopad, Vellore and Chingleput are almost completed. The system of leasing fisheries direct to fishermen's co-operative societies has proved very satisfactory at Hampapuram, and efforts are being made to extend its advantages.

Inland fisheries

431. The education of the fishing community made good progress during the year. Five out of six pupil teachers at the Training Institute passed the final examination; they took full advantage of the opportunities offered to acquire the rudiments of the industrial side of the fishing trade, in addition to their normal curriculum. The department now controls 27 schools for the fisher-folk, with a total of 1,533 pupils. Temperance work on gradual lines has been badly hampered by the present re-action from the tempestuous methods of the non-co-operation party. The year ended with a total of sixty co-operative societies, which showed a fair record of progress; the lack of educated local leaders is a distinct handicap to the work.

Miscellaneous

432. The receipts of the department fell from Rs. 2·29 lakhs to Rs. 1·99 lakhs; for this, the chank fisheries are chiefly responsible. The expenditure amounted to Rs. 3·17 lakhs. As usual, a large proportion of this sum was incurred in supervision and research work.

Finance

FORESTS (1921-22)

[*Report on the administration of the Forest Department for the year ending the 31st March 1922; Statistics of British India, Vol. II, Financial Statistics, Part II, Forests*]

General

433. Owing to a change in the orders affecting the period to be covered by the annual report, the review of the department contained in last year's Administration Report covered a period of nine months only. Any comparison of the relative statistics for 1920-21 and 1921-22 will therefore be of little value. The general defiance of the forest laws, preached by non-co-operation propagandists and adopted with temporary enthusiasm, especially in the northern districts, by a considerable section of the people, continued to hamper the work of the local officers. The unavoidably solitary nature of their calling renders forest subordinates peculiarly open to violence, and during the year under review assaults on forest officials were frequent, especially in Guntūr, where 58 such cases were reported. In North Vellore three forest guards were done to death. Apart from the danger to life, acts of wanton destruction, such as the removal of boundary cairns and the mutilation of trees, were all too common. The Māppilla rebellion dislocated the work in that area for six months; all the chief forest buildings in the Nilambur division were burnt and the departmental records were destroyed. It would be mere guess-work to attempt to estimate in rupees the loss caused to the department by political unrest during the year. To cope with the abnormal situation, a special magistrate was temporarily appointed in Guntūr to try forest cases; in Palnad a special Assistant Conservator worked in collaboration with the punitive police to enforce the provisions of the forest laws; and in Cuddapah punitive police were engaged in similar work under the guidance of a forester. During the year steps were taken to keep Government informed of the state of public opinion by the formation of a non-official Forest Advisory Committee presided over by the Member in charge of the Forest Department. In Guntūr, Coimbatore and South Kanara, committees or conferences enquired into local forest grievances, and in every case the Government took steps to carry out the improvements or concessions suggested.

Area

434. During the year under review, the area of reserved forests rose from 18,826 square miles to 18,863 square miles, while the extent of reserved lands shrank from 501 to 441 square miles. The main changes were the conversion to reserved forest of 84 square miles of reserved lands and the disafforestation of 47 square miles of reserved forests, chiefly in order to provide for the extension of cultivation. About 162

Demarcation

miles of forest boundaries were newly demarcated during the year, chiefly in the districts of Lower Gōdāvari, Bellary, Guntūr and Madura. At the close of the year, 753 miles remained to be demarcated, chiefly in South Salem, Kollegal, North Coimbatore and Madura. The length of old boundaries repaired during the year was 21,692 miles against 20,077 miles in the previous year. The cost of extending, repairing and maintaining boundaries was Rs. 18,759. The Survey of India Party worked in

Survey

West Cuddapah, where an area of about 44 square miles was surveyed on the scale of 2″ to the mile, and in Madura, where the reserves in the Palni and Sholavandan ranges were re-surveyed. They also carried out the verification of a portion of the Mysore-Malabar boundary. Some

Working plans

progress was made in the preparation of simple working schemes for the extraction of fuel, small timber and bamboo. Regular working plans for the large timber forests must await the formation of an engineering branch of the department.

Works

435. Two hundred and seventy-nine miles of new roads were constructed at a cost of Rs. ·96 lakh and 1,267 miles were repaired at a cost of Rs. 1·06 lakhs. Government have ordered that the scheme of road

development in the Javadi Hills should be limited to the completion of two roads only, the Amerdi-Nādanūr road and the Kōmattiyēri-Patrakad road. The construction of the new Mount Stuart Ghât road at a cost of Rs. 2·02 lakhs was sanctioned, but owing to delay on the part of the contractor the expenditure during the year amounted only to Rs. 21,437 against the allotment of Rs. 60,000. In connexion with the exploitation of the Chenat Nayar forest the construction of the road leading to the Sappal station was completed at a cost of Rs. 17,494. The most important building operations of the year were the completion of the saw-mill buildings at Russellkonda, the partial construction of the rest-house, subordinates' quarters and coolie lines in the Chenat Nayar forest and the completion of the circuit house at Nilambur. The Chenat Nayar construction involved an expenditure of Rs. 23,593 and the Nilambur circuit house was completed at a cost of Rs. 13,847, only to be burnt by the Māppillas almost immediately afterwards. Minor operations in respect of buildings such as inspection bungalows, range offices, rangers' quarters and subordinates' lines, were carried out in various parts of the Presidency. The total expenditure on buildings amounted to Rs. 2·52 lakhs against Rs. 1·87 lakhs during the previous nine months. A sum of Rs. 12,337 was spent on the construction and repairs of tanks and wells and on the improvement of the water-supply in the forests. It is hoped that the problem of the Mount Stuart water-supply in South Coimbatore will shortly be solved as an excellent perennial spring has been discovered.

Roads

Buildings

436. There was a marked increase in the number of forest offences, the total for the year being 29,040 against 23,947 in the previous year. Unauthorized felling as usual formed the largest proportion of forest crime and amounted to 67 per cent of the total. Grazing offences amounted to 24 per cent. Nearly 71 per cent of the cases that remained undetected related to offences connected with injury to the forests by fire. Of the 27,503 cases disposed of during the year (including the pending cases of the previous year), 8,465 were dealt with by magistrates, 17,061 were compounded and 1,977 cases were withdrawn. Of the cases disposed of by magistrates, 7,394 ended in conviction and 1,071 in acquittal. The percentage of failure in the cases brought to trial was 12·6 per cent. The total amount of compounding fees was Rs. 2,29,633. The average compounding fee paid in respect of 17,061 cases was Rs. 13-7-4 as against Rs. 12-13-0 in the previous year. In 258 square miles of reserves in Upper Gōdāvari, 1,197 square miles in three Kurnool divisions, 10 square miles in Kollegal and 20 square miles in North Coimbatore, the system of early burning under departmental supervision was continued with satisfactory results. This system consists of setting fire to the grass as soon as it is dry enough to burn, the resulting fire being much less severe than if it occurred later in the season ; the cost of the work is appreciably less than that of the orthodox system of attempting to prevent fires. Protection from fire in Cuddapah is still unsatisfactory and the question of changing the present system and introducing early burning is now engaging the attention of the local officers. The total area over which special protection was attempted during the year was 5,844 square miles, 407 square miles being burnt. This result is fairly satisfactory. About 21 per cent of the total area of forests in the Presidency was closed to grazing against 23 per cent in the previous year ; of this area 5 per cent was closed for part of the year only. In Kurnool East all the reserved forests were thrown open to grazing on account of the scarcity of fodder, and 57 square miles in Kollegal and Wynaad were thrown open to grazing as there appeared to be no good reason for closing them. In Guntūr, as a result of an inquiry held by the Chief Conservator under the orders of Government, all the reserves which were formerly closed to grazing from March to July were thrown open for grazing throughout the year and Government have ordered that the old restriction should not be re-imposed until further orders. For the open area of over 16,000 square miles permits were issued for the grazing of 1,703,124 animals against 2,018,083 animals, giving an incidence of 6·01 acres per animal against 4·71 acres in the previous

Protection

Offences

Fire protection

Grazing

year. These figures do not include 76,865 animals which were allowed free grazing, and, if these are taken into account, the incidence works out to 5·75 acres per animal. The decrease in incidence is due partly to the policy which has been steadily pursued in recent years of enhancing grazing fees in order to restrict grazing to the more valuable cattle needed for agricultural purposes, and possibly in part to the refusal to take out permits in the districts most affected by the non-co-operation movement. The incidence is still high in some forests, amounting to less than one acre to the cow unit. Inaccessible areas or areas in which there is really no grazing and which are not therefore resorted to have not been taken into account in calculating the average possibility. The revenue realized from grazing and fodder grass was Rs. 7·90 lakhs against Rs. 8·16 lakhs in the previous year. The kancha system of grazing was continued in Nellore and Chingleput. In Chingleput protection of kanchas was on the whole satisfactory ; in Nellore a number of kanchas remained unsold owing to non-co-operation. With some notable exceptions, the work of forest panchayats has been more or less unsatisfactory. A new organization for the management of panchayats, to work directly under the Chief Conservator, was being framed during the year and will come into operation in the year 1922–23.

Sylviculture

437. The chief sylvicultural problems with which the department has to deal are those connected with the regeneration of the deciduous teak forests, the ever-green forest of the Western Ghâts, and the Sâl forests of Ganjām. It is now more or less universally recognized that the only efficient method of regenerating teak forests is by clear-felling followed by sowing or planting, and considerable progress has been made in converting by this method the degraded forests at Mount Stuart in South Coimbatore, where 26 acres were sown with teak in the year and 133 acres were cleared for sowing. The method has also been introduced into the valuable teak forests of the Wynaad where some 85 acres were clear-felled. In the ever-green forest the goal to be aimed at is the removal of the entire crop in one year as, if exploitation is spread over more than one year, it is impossible for modern logging machinery to work economically. These forests contain, as a rule, a prolific crop of young seedlings, and experience has proved that the sudden removal of overhead cover, which is the orthodox method of clear-felling, is fatal to the young crop. It is thought that the difficulty can be got over by girdling and so killing a proportion of the mature crop during the first year and thus stimulating the growth of the young crop by the admission of a moderate quantity of light, the remainder of the old crop being felled as soon as the young seedlings are strong enough to stand complete exposure to the light. It was intended to carry out the work on these lines in the Chenat Nayar forest in varying degrees of intensity in order to ascertain what proportion of the crop can be girdled in the first year and how long it is necessary to keep the rest of the crop standing to provide shelter, but the District Forest Officer has had so much work to do in connexion with the construction of roads and buildings and general exploitation that he has not had sufficient time to devote to experimental work on these lines. On the whole the young seedlings have not suffered from exposure of light even where fellings have been more or less severe during the first year, and it is hoped that the whole operation can be completed in two years ; if this expectation is fulfilled, the whole crop can be felled at one operation. Sowing of *Hopea parviflora*, a valuable ever-green species, has been carried out during the last two years in South Kanara on a considerable scale, some 2,300 acres having been sown ; the result has been markedly successful. For raising a crop of this species a limited amount of shade is required and it is possible that the best solution of the problem of regenerating the ever-green forest will be found in clear-felling, leaving the land fallow for, perhaps, two years, and then introducing *Hopea* under the shade of the re-growth which by that time should have sprung up sufficiently to provide cover. The regeneration of the Sâl forests in Ganjām is a comparatively simple matter and the question of the best

means of regeneration may be said to have been solved by the adoption of clear-felling ; no sowing or planting is necessary in this case as a prolific crop of young Sâl springs up after the old one has been removed. In the Nilambur division, the Mâppilla rebellion seriously interfered with the work of regenerating the areas which had been felled, as it was impossible to carry out any weeding or tending ; the young crop, however, has not suffered as much as might have been anticipated. The worst portions were burnt and re-sown.

438. The output of timber during the year under review was 108,400 tons against 98,450 tons in the previous year. Twenty thousand eight hundred and twenty-five tons were extracted by departmental agency and 81,675 tons by purchasers. About 4,000 cubic feet of timber, chiefly *Terminalia tomentosa*, were sent to Messrs. Howard Brothers, London, but the prices obtained were well below expectations. The timber appears to vary very considerably in the qualities demanded by furniture makers and this is a matter which requires further investigation. Seven hundred tons of miscellaneous timber, consisting chiefly of species unknown to the market, were extracted and sent to the Kolar Gold Field, the authorities there having agreed to test their suitability for mining purposes ; it was found that only a certain number of species were suitable for use. A fresh arrangement was made during the year under which these species only are to be supplied. The Russellkonda saw-mill was completed during the year and in the Chenat Nayar forests two Holt five-ton caterpillar tractors were purchased. The work of constructing roads and buildings in the last-named locality was practically completed during the year and it is hoped that considerable progress will be made in exploitation during the current year ; but experience has shown that efficient exploitation is impossible without a specially trained staff. Government have taken steps to secure the appointment of a Chief Forest Engineer and proposals will be submitted in 1922–23 for the formation of an Engineering branch of the department. Forty-nine thousand three hundred and sixteen tons of fuel were removed departmentally and 273,950 tons by purchasers. Prices of fuel in the large towns showed a tendency to increase, owing either to increased wages and transport charges or to short supplies or to a combination of these causes. The prices were highest at Anantapur (Rs. 22–4–0 per ton), Tanjore (Rs. 22–8–0 per ton), Trichinopoly (Rs. 23 per ton) and Madura (Rs. 24–1–0 per ton). The revenue from bamboo during the year was Rs. 3·21 lakhs against Rs. 2·64 lakhs in the previous nine months. The possibility of utilizing the bamboo for the paper-pulp industry has been negatived, for the present at least, by the extension of flowering noted in the previous year. In the auction sale held at Satyamangalam in December last, 218 tons of sandalwood were sold for Rs. 2,48,425, while in the sales held at Tiruppattûr and Vellore in November and December, 303 tons were sold for Rs. 3,56,913. The total average price secured was Rs. 1,160 against Rs. 1,599 per ton in the previous year. The sandalwood market is very unreliable. The Military Farms department confined its operations during the year to Bellary, Anantapur, Kurnool South, Kurnool West and North Vellore and removed 2,834 tons of baled hay, paying seigniorage to the department at Rs. 2 per ton. There was a serious fall in the price of nuxvomica, and in most districts the lessees failed to pay their dues and their contracts were cancelled. In more than one case the lessees had under-estimated the difficulty of preventing unauthorized people from collecting and selling the produce. After providing for distillation and domestic consumption by the Khonds, it is estimated that the quantity of mohwa flowers available for export will not exceed 2,000 tons, which is insufficient for commercial purposes. No substantial revenue can be expected from this source.

Exploitation
Timber
Fuel
Bamboo
Sandalwood
Hay
Nuxvomica
Mohwa flower

439. The number of elephants in charge of the department at the beginning of the year was 125, including four baggage elephants working in Gôdâvari and Kurnool. Twenty-two elephants were captured, two were born in captivity, eleven died and one ran away at the outbreak of the Mâppilla rebellion, the net result being a stud of 137 at the end of the

Live-stock
Elephants

year, with a book value of Rs. 3,96,900. Capturing operations were conducted in South Coimbatore, Wynaad and the Nilgiris and resulted in twenty-two captures, eleven in the Nilgiris, six in the Wynaad and five in South Coimbatore. There was one accidental death due to capture. The number of captures would probably have been larger if it had been possible to carry on operations in Nilambur division, but this was out of the question owing to the Māppilla rebellion. Two captures in Nilambur and Wynaad were due to the ingenuity of the local rangers. In each case a wild tusker had been giving trouble to the tame elephants and coolies working in the neighbourhood. Two pits were dug and tame females were tied up close to them, with the result that the wild tuskers fell into the pits. These two animals are probably worth Rs. 8,000 and were captured at a cost of under Rs. 100. A stud of 281 bullocks and buffaloes was maintained during the year. Thirty-two animals died, seventy-five were butchered by the Māppillas during the rebellion, thirteen were transferred to the account of the saw-mill at Russellkonda and 106 were added by purchase. The stock at the end of the year stood at 267 with a book value of Rs. 20,177.

Bullocks and buffaloes

Forest College

440. The cost of education at the Forest College, Coimbatore, has not altered appreciably since last year, when the cost per head was Rs. 7,213 for the two years' course. The standard of work continued to be satisfactory, and the division of students under training at the end of the year was considerably above the average in ability. Of the senior students who passed out of the College during the year, twenty-one received higher standard certificates and seven received lower certificates; there were no failures. The discipline and conduct of the students were fairly satisfactory.

Finance

441. The total gross revenue during the year amounted to Rs. 47·97 lakhs against Rs. 46·16 lakhs in the previous nine months. The expenditure under Conservancy and Works and Establishments amounted to Rs. 48·42 lakhs. The result is a deficit of Rs. ·45 lakh as compared with a surplus of Rs. 11·94 lakhs during the previous year. The reasons for the fall in revenue have been summarized in the first paragraph of this review. Extra expenditure was incurred during the year by development and by the increase in salaries and travelling allowances. About Rs. 3·66 lakhs were spent on the Russellkonda saw-mill and about Rs. 1·33 lakhs on the purchase of tractors and tools, and the construction of roads and buildings in the Chenat Nayar forest.

MINES (1921)

[*G.O. No. 731, Development, dated the 26th May 1922; Statistics of British India, Vol. I, Commercial Statistics—Mineral Production*]

Output

442. As in the previous year, mining was carried on only in the districts of Vizagapatam, Nellore, Anantapur, Salem and Kurnool, the minerals raised being manganese, magnesite, mica, gold and barytes. No diamonds were extracted during the year. The quantity of mica raised fell from 587 to 222 tons, while the output of manganese, magnesite and barytes increased, by 9,207, 5,852 and 257 tons, to 16,593, 17,152 and 470 tons, respectively. The great decrease in the production of mica was due to the falling off in demand, which is chiefly attributable to the unstability of continental exchanges and particularly that of Germany. As in the previous year, only one of the three gold mines in Anantapur was at work during the year. From a total quantity of 7,900 tons of quartz mined during the year 10,108 ounces (troy) of gold and 619 ounces (troy) of silver were extracted as against 13,645 and 868 ounces, respectively, in the previous year. The output of steatite was nil.

443. Vizagapatam, Kurnool and Salem continued to be free from epidemics during the year. In the Anantapur district, cases of chicken-pox, mumps and influenza occurred in two of the mines and one case of influenza ended fatally ; the third mine was free from epidemics. The general health of the employees in all the mines was good. In Vizagapatam, the rates of wages remained the same as in the previous year, viz., 50 per cent higher than those in 1919. In Nellore the rates rose by 4 annas to 8 annas per day in the case of adults, 2 annas to 3 annas in the case of females and 1 anna to 3 annas in the case of children. In Anantapur, there was an increase in the wages of surface and underground coolies, maistris and mechanics owing to the increased cost of living. In Vizagapatam, Nellore and Salem both women and children were employed under ground, but in the gold mines in Anantapur and in the barytes mine in Kurnool women and children were not so employed.

General condition of the employees

Wages

Employment of women and children

444. Three accidents occurred in the magnesite mines, Suramangalam, and one fatal accident in the manganese mines in the Vizagapatam district. There were no accidents in Nellore, Anantapur and Kurnool.

Accidents

MANUFACTURES (1921-22)

[*Statement of Cotton and Jute Mills at work in the Presidency during the year 1921-22 ; G.O. No. 799, Development, dated the 15th June 1922 ; Report on the working of the Indian Factories Act during the year 1921 (G.O. No. 858, Development, dated the 26th June 1922) ; Report of the Department of Industries for the year 1921-22 ; Statistics of British India, Vol. I, Commercial Statistics*]

445. During the year there were 21 cotton mills at work in the Presidency, an increase of two over last year's figure. Of these, four were in the French Settlement of Pondicherry and one each in the Travancore and Cochin States. Employment was afforded to about 34,400 operatives, as compared with 32,400 in last year. With three exceptions, the concerns were carried on as Joint Stock Companies. The plant in use consisted of nearly 5,000 looms and 560,000 spindles. The number of jute mills rose from three to four, employing 3,700 operatives and utilizing 400 looms and 11,500 spindles. All were Joint Stock Companies.

Cotton and jute mills (1921-22)

446. There were 120 minor industrial concerns which did not come within the scope of the Factories Act. The decrease from last year's figure (127) is due to the omission from the list of certain concerns, the number of whose employees fell below the minimum number of fifty. Of the total, 69 businesses were worked by mechanical power ; the bulk of these were oil mills and rope, rubber and tile works. Tanneries predominated among the works run without mechanical power, followed by rope works and cotton-weaving establishments.

Minor industries (1921)

447. The Department of Factories continued to be under the control of the Commissioner of Labour during the year. Ten factories were removed from the list and 44 were added, giving a closing total of 545 as compared with the opening total of 511. Of these 355 were perennial and the remainder were seasonal, most of the latter being cotton works. The average daily number of operatives rose from 101,655 to 102,341, including 6,746 Government and Local Fund employees. Cotton mills engaged about one-fourth of the total number of hands. It is satisfactory to note that child labour has decreased, probably owing to a preference for adult labour. The situation will presumably improve still further when the restrictions to be imposed by the amended Factory Act come into force. On the other hand, the demand for female labour seems to have increased ; this increase corresponds with the growth in the number

Factories (1921)

of rice mills and cotton-mills, in which a large number of women are employed. The certification of children was rigorously carried out, managers of defaulting factories being prosecuted. Eight hundred and sixty-six registered factories were inspected during the year, and the suggestions made to the managers of 115 unregistered factories which were informally visited were, in the majority of cases, well received. The general health of the operatives has been good, and sanitation has been the subject of careful supervision by the inspecting staff. In 26 factories, as against 16 in last year, schools were maintained for the children of the work-people. The general rise in wages was due to the enhanced cost of living. Apparently there was no difficulty in obtaining the necessary labour. Tanjore district was selected this year for a special study of comparative wages ; the results show that factory wages are distinctly lower than those paid by extra-factory employers. The assumption is that the regularity of factory employment makes the workers satisfied with smaller wages than those obtainable by casual labour. Twenty-four factories suffered from strikes, which involved 24,524 workers. The employers yielded to the demands of the strikers in five cases, and in all the other cases the strikes collapsed. Political agitation, inadequate wages and the alleged unjust dismissal of employees were the principal causes of these stoppages. Five large fires occurred during the year, causing a loss of property worth Rs. 91,600. In one case a fire in the employees' quarters resulted in the death of a woman ; apparently more care is now being taken to build quarters of non-inflammable material. The railing of dangerous portions of machinery was strictly enforced. There were eight fatal, four serious, and 979 minor accidents. Although this figure is an increase on that of last year, it is stated that the increase was due to stricter supervision, many minor accidents having escaped notice in the previous year. Fourteen persons were involved in prosecutions under the Act and 11 were convicted.

Industries (1921-22)

General

448. During the year it was found that the volume of work did not justify the appointment of as many as five Assistant Directors of Industries, and it was found possible to reduce the number of divisions from five to three, centred at Bezwada, Coimbatore and Tanjore. Proposals are now before Government for the further re-organization of the department, including the substitution of Assistant Industrial Engineers for the existing Assistant Directors. The Director was present at the Departmental Conference held at Simla. He also visited Ceylon, Patna and Bangalore to attend various conferences and meetings. The Department was awarded prizes at the Exhibitions held at Bezwada, Tiruppur and Patna for their exhibits of soaps, inks, sizing-machines, weaving appliances and cloths. The Board, consisting of non-official gentlemen, with the Director as Chairman, rendered valuable assistance to the

General assistance

activities of the Department. The Information Bureau continued to furnish information to an increasing number of inquirers. Guidance was given in the choice of markets, the selection of plant, the best sources for the supply of raw materials and the commercial value of projected schemes, and many samples of raw materials were analysed at the request of individual traders. The Department has been given a measure of advisory supervision over mining questions, which are primarily under the control of the Board of Revenue. Merchants desirous of engaging in overseas trade were furnished with confidential information concerning the status of the traders with whom they proposed to enter into agreements. The offer of free analysis of samples of vegetable oils was withdrawn during the year, as manufacturers showed no desire to attach a certificate of purity to their products. Steps were taken to wind up the Munitions Board transactions still pending from the War period. Useful tables of statistics relating to rail-borne trade, minerals, planting products, etc., were compiled regularly. A beginning was made in the formation of

Chemical research

a Museum in the office of the Director. On the chemical side, the possibility of utilizing flour phosphate produced from the deposits of nodules in the Trichinopoly district for agricultural purposes was considered,

but the results were not encouraging. Interesting experiments were conducted in the utilization of limes and tamarinds as sources of citric and tartaric acids. The industrial chemist also started investigations into the methods of coir production, the scientific side of which has hitherto been untouched. He proved, *inter alia*, the fallaciousness of the popular belief that salt water is an essential element in the process of retting. Vigorous canvassing led to an increased demand for the products of the Kerala Soap Institute at Calicut, and the Government Travellers at Calicut and Madras canvassed orders for Rs. 1,60,000 worth of soaps during the year. The sales in the Telugu districts were badly hampered by the prevalence of the non-co-operation movement. The balance sheet showed a net profit of over Rs. 16,000. The causticising plant ordered during the war period is not likely to be of much use, now that the world market is again open, as it is highly improbable that the prices of the Government products can be so cut as to compete with the open market prices; the question of disposing of the stock of soda ash is therefore under contemplation. The difficulty of finding suitable containers rather hampered the sale of Government-made inks, but the obstacle has now been surmounted and heavy sales are expected in the current year. Laboratory experiments were conducted in connexion with the manufacture of adhesives, vinegar and pottery. In the Glue Factory, the plant was overhauled and regular manufacture commenced. In the Sugarcane-crushing Factory, last year's loss of Rs. 1,800 was converted into a profit of Rs. 1,050. Ten weaving parties toured the country, introducing weaving implements; the work was heavily handicapped by the difficulty of getting men of sufficient intelligence and experience to act as maistris. Government have now approved of the proposal to promote the hand-loom industry by the establishment of a Textile Institute in Madras to cheapen the preparatory processes by the manufacture of machine-made warps. The Textile Expert, after full tests, was able to prove that hand-spinning as a form of whole-time employment is not an economic proposition in this Presidency. This expert pronouncement is of special significance in view of the opinions to the contrary expressed in the Legislative Council. During the year 28 applications were received for loans for the purchase of agricultural machinery, and five cases were sanctioned. In the South Arcot district the mapping, by means of boring, of the underground water-supply of that district was almost completed. In all the divisions aid was rendered to agriculturists by the erection of pumping and industrial installations, by the inspection of apparatus, and by the conducting of boring operations.

Government establishments

Pumping and Boring

449. During the year the Government of India decided to provincialise the State technical scholarships hitherto awarded by them to students from different provinces. The responsibility for four scholarships was accordingly assumed by the Provincial Government, thus bringing the total number of scholarships tenable abroad payable from provincial funds to eight. Three scholars were sent to the Bombay Technical Institute, the monthly value of the scholarships having been raised to Rs. 60 from Rs. 30 to meet the greatly enhanced cost of living in that town. Sixty smaller scholarships were awarded to pupils at aided industrial schools or workshops; this aid is proving of immense value to apprentices. A highly successful exhibition was held in Madras to popularize the products of the assisted schools. The Madras Trades School did much to raise the level of technical knowledge among the younger apprentices and artisans in the Madras city. The present location of the school in rented buildings and the temporary footing of the staff are very discouraging to the work, and it is to be hoped that arrangements will be made very soon to place this very important institution on a permanent basis. At Perambūr a branch of the Trades school did useful work among the railway apprentices. The Leather Trades Institute entertained its maximum number of students, and the result of its past work is seen in the success of the trained students, who,

Industrial education

in spite of the general depression in the trade, have almost without exception secured good billets in their profession. A vast amount of unobtrusively good work is being done by mission industrial schools.

Aided Schools

During the year there were 38 assisted schools at work in the Presidency, training 1,748 pupils. The amount of pecuniary assistance which they received from Government was of necessity very restricted, and in the case of foreign missions the abnormal state of the exchanges was a sore blow to their activities.

School of Arts

The roll of the School of Arts showed a total of 234 pupils at the close of the year, of whom 18 were women. The lack of hostel accommodation has so far prevented any considerable number of students from the mufassal from attending the school. Both the output of work and the total sales showed a decided increase over last year's figures. Of 165 pupils who appeared for the technical examinations, 73 per cent were successful, as against 85 per cent in last year. There was a satisfactory increase in the number of ex-pupils who obtained permanent technical employment.

Finance

450. The receipts and charges of the year increased from Rs. 2,58,000 and Rs. 8,69,000 to Rs. 2,86,000 and Rs. 11,50,000, respectively. The net cost of the department was thus Rs. 8,63,000. The transfer of the School of Arts to the control of the Department, increased building operations and grants-in-aid, and non-recurring expenditure on European stores for the Trades School were mainly responsible for the enhanced expenditure.

LABOUR (1921–22)

[*Third Annual Report of the Labour Department for the year 1921–22*]

General

451. The activities of the Department during the year included the administration of the Indian Factories Act, the investigation of labour and economic problems, the material and moral advancement of the "Depressed Classes" and the control of criminal tribes settlements. The working of the Factories Act has been reviewed in the section on "Manufactures" which immediately precedes this section, and the present review touches on the other three branches of the work of the Department. The abolition of all the posts of Assistant Commissioner of Labour by the vote of the Legislative Council in March 1922 occurred so late in the year that its effects will rather fall to be recorded in next year's Report.

452. The unrest among the labouring classes in Madras City, apparent throughout the greater part of the year, culminated in the tragic months of rioting, arson and murder which followed the closing of the Buckingham and Carnatic mills. The troubles called for the continuous presence of the Commissioner and his assistants in the affected area, and after the collapse of the strike a successful attempt was made to form a Workers' Welfare Committee, at which the management and the workers' representatives could meet to discuss questions of the type which had given rise to the disorders. The Labour Advisory Board met at intervals throughout the year to discuss labour legislation and kindred topics. A quinquennial census of wages was taken during the year, and a report thereon was submitted to Government. The representations of the Commissioner resulted in the passing into law of the Act, already referred to in the section on the "Course of Legislation," by which those tenants of Madras City who had built houses on land in the ownership of others were protected from the threat of eviction; the majority of these persons are Ādi-Drāvida labourers. At the time of the labour riots, when a large number of the Ādi-Drāvidas were rendered homeless by acts of arson, the Labour Department took up the work of establishing a refugees' camp and of utilizing the gifts of public and private charity. In the mufassal, work among the "Depressed Classes"

was centred mainly in the Tanjore, Gōdāvari and Chingleput districts, in each of which a special Assistant was at work. Mention has already been made of the rapid progress of the co-operative movement among these classes ; in addition to aiding in this branch of work, the officers of the Department were busy with schemes to enable the labourers to acquire their own house-sites ; for the possession of his own house-site not only frees the labourer from the constant fear of eviction but is, in his own and his fellows' eyes, a certain hall-mark of respectability. In all the districts steps were taken to reserve tracts of land for cultivation by the Ādi-Drāvidas. During the year the Commissioner visited five criminal tribes settlements and prepared special reports on their progress. The department expended during the year almost Rs. 4 lakhs on loans and free grants to the members of the "Depressed Classes" and on the promotion of education among them.

SEA-BORNE TRADE (1921–22)

[*Review of the Sea-borne Trade of the Madras Presidency for the year 1921–22 ; Annual Volume of the Sea-borne Trade and Navigation of the Madras Presidency ; Statistics of British India, Vol. I, Commercial Statistics—Foreign Trade and Shipping ; Review of the Trade of India. Accounts relating to the Sea-borne Trade of British India. Annual Statement of the Foreign Sea-borne Trade and Navigation of British India, 2 Vols. ; Annual Statement of the Coasting Trade and Navigation of British India*]

General summary

453. The aggregate value of the sea-borne trade of the Presidency was Rs. 73·83 crores, an increase of Rs. 0·55 crore as compared with last year and of Rs. 15·67 crores as compared with 1913–14, the last pre-war year. The collapse in exchange during the year 1920–21 saddled the market with a very dear stock of imports, though it was below the actual requirements of the country. High prices prolonged the time of recovery, compelling consumers to abstain from purchasing goods for which they could find cheaper substitutes. The increase in the general rates of Customs duties and the imposition of enhanced rates on luxuries tended to restrict the volume of fresh imports, and this to some extent helped the slow process of clearing the market. There was a good monsoon all over India and consequently there was no lack of agricultural products for export. The lowering of freights and the low rate of exchange also favoured exports. Despite these factors the improvement in the export trade was not up to general expectations. During the first half of the year the outlook was brighter and in October the exchange rose to nearly 1*s.* 6*d.*, and this presaged a better state of affairs for both the import and export trades. Then came the collapse of the German mark which had an immediate effect on the demand for India's raw materials. The buying powers of continental countries were reduced and prices collapsed. This can be instanced by the price of groundnuts at Marseilles which dropped from £27 10*s.* to £19 10*s.* in the course of a month. The demand for this crop, however, recovered and export was stimulated by the sagging of exchange and the cutting of freight rates. The year closed with a favourable balance of trade, the excess of exports over imports amounting to Rs. 3·8 crores.

Foreign trade

454. The total value of the foreign trade in private merchandise declined by Rs. 1·82 crores as compared with the previous year. Under foreign trade imports declined by Rs. 4·09 crores, while exports showed an increase of Rs. 2·30 crores. The value of the sea-borne trade by private venture at the Port of Madras represented 47 per cent of the total trade of the Presidency as compared with 50 per cent in the previous year and 41 per cent in 1913–14, and amounted to Rs. 34·76 crores as against Rs. 35·55 crores, a decrease of Rs. 0·79 crore or 2 per cent. Foreign trade declined

from Rs. 29·24 crores to Rs. 27·27 crores or by 7 per cent. The total foreign trade of the minor ports amounted to Rs. 18·30 crores as against Rs. 18·35 crores in the previous year. To this total the ports of Tuticorin, Cochin and Dhanushkodi alone contributed more than half, the other ports with a trade of over Rs. 1 crore being Cuddalore, Negapatam and Calicut.

Foreign imports

There was a decrease of Rs. 4·09 crores or 16 per cent in the imports of private merchandise. The decrease was due to smaller receipts of manufactured cotton, metals, motor-vehicles, paper and pasteboard, wearing apparel, hardware, articles by post, provisions, cycles, precious stones, stationery, sugar and liquors. The chief items showing an increase were railway plant and rolling stock, machinery, coal, mineral oils, cotton twist and yarn. The value of imports of cotton twist and yarn improved by Rs. 11·50 lakhs or 5 per cent and that of cotton piece-goods declined by Rs. 158·62 lakhs or 40 per cent as compared with that of the previous year. The quantity of piece-goods imported during the year was less than one-fifth of that imported in 1913–14 and this was due chiefly to the forcing up of rupee prices to such an extent by the high cost and the fall in exchange (which in many cases was not covered) that consumption was checked. The Indian consumer was too poor to buy at these prices, so that cheap grey cloth mostly of Indian make invaded the market. Imports of dhuties, prints, printed sāries, etc., were almost negligible. Further there was a fairly full stock in the hands of importers and dealers at the beginning of the year and imports therefore declined. Political influences also were at work on the imports of yarn and cloth. The charka cry made dealers very chary of buying cloth, but yarn was imported in larger quantities for improving local manufactures and the lowering of home prices of yarn further stimulated importation. The United Kingdom supplied 97 per cent of the cotton goods imported, Japan's share in the trade being greatly diminished. Imports of paper and pasteboard declined from Rs. 106·92 lakhs to Rs. 33·80 lakhs. Imports of railway plant and rolling stock increased from Rs. 173·85 lakhs to Rs. 314·21 lakhs. The increase is due to the fact that the large imports in 1920–21, for which invoices were not ready in that year, were included in the year under report ; further, almost all the locomotive engines and tenders, for which orders were placed in England, were received during 1921–22.

Foreign exports

Exports of private merchandise increased by Rs. 2·39 crores as the result of larger shipments of seeds, leather, grain and pulses, hides and skins (raw), spices, palmyra fibre, building and engineering materials, and wool (both raw and manufactured). Exports of seeds expanded by 132 per cent in value and 139 per cent in volume owing to the abundance of available tonnage, the chief item being groundnuts shipped to France. Under the influence of a plentiful supply of freight and favourable exchange, exports were more than trebled and surpassed pre-war dimensions. Tanned hides and skins had to yield pride of place to groundnuts. The London market was still prejudiced by the large unsold stocks of tanned hides. The consequent stagnation in demand from the United States acted adversely against any revival of the trade. During the greater part of 1921 tanning operations and the shipping of tanned skins had been stopped in accordance with the resolution of the South Indian Hides and Skins Association. This embargo was withdrawn during 1922 and shipments of tanned hides and skins were resumed. Exports of hides and skins (raw) showed an increase of 31 per cent, the total value being Rs. 63·7 lakhs as against Rs. 48·6 lakhs of the previous year. Export of raw cotton was slightly in excess of the previous year's figure, though a fall in prices brought the value down by 17 per cent. The most noticeable feature was the recovery in the demand from Japan, Madras's chief customer, whose trade in the previous year had sadly diminished owing to a serious financial crisis. The prohibition of the export of rice and pulses, which was imposed in 1918–19, continued in force throughout the year, the restriction on the export of rice alone being removed with effect from 1st April 1922. The total value of re-exports amounted to Rs. 27·68 lakhs as against Rs. 37·11 lakhs.

455. The total value of Government stores, imported and exported, amounted to Rs. 32·44 lakhs and Rs. 0·47 lakh, respectively, as compared with Rs. 30·11 lakhs and Rs. 0·68 lakh in the previous year. The increase of Rs. 2·33 lakhs under imports was due to an increase of Rs. 2·92 lakhs under telegraph materials and of Rs. 2·89 lakhs under paper and pasteboard, while receipts of chemicals, and drugs and medicines declined by Rs. 2·79 lakhs and Rs. 1·43 lakhs. **Government transactions**

456. The trade with the United Kingdom represented 44 per cent of the total trade as compared with 52 per cent in 1920–21, showing a decrease in value to the extent of Rs. 446 lakhs or 18 per cent. In 1920–21 the total value of foreign trade with the United Kingdom represented 25 crores of rupees, while in 1921–22 it was 20 crores. The trade with the British Empire was 65 per cent of the total trade, Europe claiming 21 per cent, Asia 7 per cent, Africa ½ per cent and America 6½ per cent, as against 71 per cent, 15 per cent, 7 per cent, nil, and 7 per cent, respectively, in the previous year. **Distribution of trade**

457. The aggregate value of the coasting trade improved from Rs. 2,538 lakhs to Rs. 2,792 lakhs, Rs. 2,773 lakhs representing private merchandise and Rs. 19 lakhs representing Government stores and treasure. Imports of Indian merchandise improved from Rs. 1,279·27 lakhs to Rs. 1,508·68 lakhs and those of foreign merchandise from Rs. 190·60 lakhs to Rs. 251 lakhs. Exports of Indian and foreign merchandise amounted to Rs. 990·22 lakhs and Rs. 22·71 lakhs as against Rs. 808·07 lakhs and Rs. 18·29 lakhs, respectively. **Coasting trade**

458. Cochin maintained its position as the first among the minor ports, although Tuticorin still retains its pre-eminence in foreign trade. The relative importance of the trade of the minor ports remained much the same as in the previous year. Cuddalore improved its position from ninth to seventh place at the expense of Negapatam. **Ports**

459. The total number of vessels entered and cleared increased from 2,476 to 2,685 or by 8 per cent and their tonnage from 2·46 million tons to 3·06 million tons or by 24 per cent. British vessels accounted for 84 per cent of the whole tonnage and British Indian and native craft 2 per cent. Of 122 foreign vessels (entries and clearances combined), 36 were Dutch, 22 German, 20 Italian, 14 American, 10 Japanese, 9 Swedish, 8 Norwegian, 2 Greek and 1 French. The general slump in trade all over the world caused the supply of tonnage to be in excess of the demand and led to the laying up of a larger number of vessels. The downward trend of freights continued and competition became keen. Shippers of groundnuts benefited to a greater extent than others. The number of vessels that entered with cargo was 11,361 of 5,390,828 tons and in ballast 5,330 of 327,160 tons aggregating 16,691 vessels of 5,717,988 tons during the year as against 15,028 vessels of 4,179,255 tons in the previous year. Twelve vessels aggregating 540 tons were built and registered during the year 1921–22, the previous year's figure being 28 vessels of 1,987 tons. **Shipping** Foreign trade; Coasting trade

460. The total revenue receipts for the Presidency rose from Rs. 195·39 lakhs to Rs. 215·20 lakhs or by 10 per cent as a result of a revision in the Tariff Schedule which enhanced the rates of duty in March 1921 and March 1922. The total disbursements on account of the Customs Department throughout the Presidency amounted to Rs. 10·33 lakhs as compared with Rs. 9·20 lakhs in 1920–21. The number of cases dealt with under the Sea Customs Act (including those under the Merchandise Marks Act) during the year was 1,564 as against 1,509 in the previous year. Of these, 773 cases occurred at Madras and 791 at the outports. Attempts at smuggling jewellery became more frequent as the duty on them was enhanced and six cases were detected at Madras and two at Dhanushkodi, while gold smugglers on the land frontiers, especially at Pondicherry and Karikal, turned their attention to matches and gold thread. **Miscellaneous**

PUBLIC WORKS

GENERAL (1921–22)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1921–22*]

Administrative changes

461. The appointment on a permanent basis of a Deputy Secretary to Government was sanctioned by the Secretary of State during the year. The Government of India issued orders on the formation of the Specialists' Service, in accordance with which appointments were made to the Architectural, Electrical and Sanitary branches. The control of the Harbour Engineer and his staff was handed over to the Marine Department. A temporary division for the revision of irrigation projects, working under the Chief Engineer for Irrigation, was formed. The Mopad Project division was abolished at the beginning of the year. In the first Circle the temporary Koraput division was continued for a further period of one year. The Rajahmundry subdivision, which formed part of the Gōdāvari Northern Division, was transferred to the Tank Restoration Scheme Division, and the Vizianagram subdivision was abolished, the work being added to that of the Palkonda subdivision. In 1920 a special subdivision had been constituted at Cuddapah to carry out the departmental construction of certain buildings; this was abolished during the year, as the available funds were not sufficient to employ the staff fully. The re-construction of the buildings damaged by the Māppillas and the erection of quarters for the Auxiliary Police were expedited by the establishment of a temporary subdivision at Malappuram in the Fourth Circle. The two subdivisions attached to the Nilgiri Division were abolished during the year.

Chief Engineer's office

Consulting Architect's section

462. The Consulting Architect section was engaged in the normal work of preparing drawings and estimates for buildings. The Special Consulting Architect who was appointed in 1920 continued to attend to the lay-out and designs of public offices and Government residences. All questions relating to the property and lands of Government in the City of Madras were referred to him, and in conjunction with the Director of Office Systems, he has been preparing schemes for the concentration of Government offices in Government buildings, with a view to cutting down the present expenditure on rented offices. Two hundred and thirty-two drawings of schemes estimated to cost Rs. 12·01 lakhs were drawn up in this section.

Technical section

In the technical section, 258 estimates of an aggregate value of Rs. 380·4 lakhs were scrutinized. Of these, 180 totalling Rs. 193·81 lakhs related to buildings, 20 aggregating to Rs. 53·26 lakhs to water-supply, 23 totalling Rs. 92·38 lakhs to drainage, eight totalling Rs. 11·85 lakhs to roads and 18 totalling Rs. 18·09 lakhs to bridges and causeways. There were in addition nine miscellaneous schemes of a value of Rs. 11·01 lakhs. Among the estimates there were 71 of an estimated cost of over one lakh of rupees each.

Electrical section

Electricity shows no decrease in popularity either in Madras City or in the mufassal. In three years the number of installations working has risen from 265 to 383. The municipal councils of Octacamund, Madura, Bezwada and Negapatam are taking an active interest in schemes for the supply of electric power in their municipal areas. During the year licences for the supply of electrical energy were granted to the towns of Bellary, Cochin, Bezwada and Ootacamund, and requests for licences for Madura and Trichinopoly were under consideration. The Electrical Engineer to Government scrutinized 182 estimates of an aggregate value of Rs. 4·52 lakhs. The expenditure on original works was Rs. 2·11 lakhs as against Rs. 2·54 lakhs in the previous year, and the amount spent on the installations in charge of the Department (apart from the actual consumption charges) was Rs. 1·48 lakhs as against Rs. 1·16 lakhs in 1920–21; this increase in expenditure follows naturally on the increase in the number of installations.

CIVIL WORKS (1921-22)

463. The total expenditure on civil works for the year, including expenditure from contributions, minor works and repairs, was Rs. 83·44 lakhs as against Rs. 79·08 lakhs in the previous year. A sum of Rs. 0·71 lakh was spent on the construction of the Civil Hospital at Vizagapatam ; the total expenditure to date on this work was Rs. 5·09 lakhs against the estimate of Rs. 5·91 lakhs. Extensions to the Agricultural College, Coimbatore, were started during the year, and Rs. 1·34 lakhs were spent thereon. Land for the residences of Government officers at Coimbatore was acquired at a cost of Rs. 1·14 lakhs ; the total outlay on the work stood at Rs. 1·57 lakhs against the estimated cost of Rs. 1·61 lakhs. Seven buildings of the St. George's Homes, Keti, were completed, the expenditure during the year being Rs. 1·75 lakhs. A further sum of Rs. 1·43 lakhs was spent on the construction of the new Rayapuram Hospital ; at the end of the year the total outlay was Rs. 10·52 lakhs against the estimated cost of Rs. 12·57 lakhs. The Chemical Wing of the Presidency College, Madras, absorbed an expenditure of Rs. 1·27 lakhs, bringing the total up to Rs. 3 lakhs against the estimated cost of Rs. 4·42 lakhs. The new Civil Engineering College at Guindy is now practically completed, at a total cost to date of Rs. 15·86 lakhs, the estimate being Rs. 15·65 lakhs. The widening of the Willingdon bridge in Madras and the reconstruction of the Hutton bridge to carry a double tram-line involved an expenditure of Rs. 1·95 lakhs. Work on the Anantapur water-supply scheme was in progress and an outlay of Rs. 2·98 lakhs was incurred during the year, bringing the total outlay to Rs. 3·71 lakhs against the estimated cost of Rs. 4·53 lakhs. The Madura water-works were improved at a cost to date of Rs. 6·52 lakhs ; the expenditure during the year on the Rāmēswaram water-supply was Rs. 30,000. The expenditure on the much needed Tuticorin water-supply scheme was Rs. 0·94 lakh, which brings the total outlay so far to Rs. 5·11 lakhs against the estimate of Rs. 18·47 lakhs. Up to date the Madura drainage scheme has cost Rs. 27·3 lakhs, the estimated cost being Rs. 38·21 lakhs. An open drainage scheme for the Vellore municipality was in progress ; the year's outlay of Rs. 0·65 lakh brought the total expenditure to Rs. 4·29 lakhs against the estimated cost of Rs. 4·37 lakhs. Minor water-supply schemes involving a sum of Rs. 0·49 lakh were in progress or under investigation.

Works in progress

Buildings

Water-supply and drainage

464. The value of work done during the year under all heads in the Dowlaishweram workshops amounted to Rs. 1·83 lakhs against Rs. 2·19 lakhs in 1920-21 ; the decrease, as in last year, was due to the restrictions imposed on expenditure. In the Bezwada workshops the value of work turned out was Rs. 0·95 lakh against Rs. 1·07 lakhs in the previous year. Here again the financial shortage restricted operations. The value of the work turned out in the workshops at Madras again rose from Rs. 4·45 lakhs to Rs. 4·57 lakhs, the highest figure for over ten years. Materials which were not obtainable during the war became available during the year and an increased output was the result.

Workshops

RAILWAYS (1921-22)

[*Administration Report of the Public Works Department, Madras Presidency, for the year 1921-22 ; Statistics of British India, Vol. I, Commercial Statistics—Railways*]

465. The railway systems in the Presidency are controlled by the Railway Board. The District Board Railways are, however, subject to the general control of the Local Government. There was no change in the open mileage during the year which remained as follows : broad gauge 1,725·80 miles, metre gauge 1,983·65 miles and narrow gauge 123·30 miles. Besides this there were 237 miles of railway (25 miles broad gauge and 212 miles metre gauge) owned by the District Boards of Tanjore, Kistna,

Control

Development

Coimbatore, Guntūr and Salem. No new lines were constructed during the year. Arrangements for re-commencing the construction of the Tinnevelly-Tiruchendur Railway were in progress. A special staff for the acquisition of lands for the Mayavaram-Tranquebar Railway was sanctioned by Government. Proposals for expediting the construction of the Manamadura-Sivaganga Railway were under consideration. The

Surveys

preliminary survey of the Shoranur-Nilambur-Manantoddy line was completed while that of the Cochin-Anamalais-Mannar Railway was in progress. No fresh surveys were undertaken during the year. There was

Accidents

no appreciable decrease in the number of accidents. There were four serious accidents, two of which occurred on the South Indian Railway and two on the Madras and Southern Mahratta Railway. Owing to the floods in October 1921 two piers of the new Vellar diversion between Porto Novo and Kille stations on the South Indian Railway collapsed : transhipment was immediately arranged and through running was restored within a week. In August 1921, traffic between Shoranur and Calicut on the South Indian Railway was suspended for about ten days owing to the removal of rails, bolts, etc., by the Māppilla rebels: some damage was caused to property but there was fortunately no loss of life. A pier of a bridge on the Guntakal-Hubli section of the Madras and Southern Mahratta Railway was wrecked in October 1921 by floods and the girders were displaced: traffic was suspended for about a week. Again in November 1921, temporary sleeper cribs of a bridge on the same section were washed away owing to heavy floods, which suspended traffic for about a week. Besides the accidents referred to above there were several attempts at train wrecking on certain sections both of the South Indian and the Madras and Southern Mahratta Railways ; the culprits escaped undetected. An officer was

Miscellaneous

appointed by the Railway Board to investigate the railway requirements of South India especially with regard to the question of gauge and the expected development of traffic by improvements to the harbours of Tuticorin and Cochin. The Secretary of State sanctioned the proposal to provide combined broad and metre gauge workshops at Trichinopoly and to convert the Erode branch into broad gauge.

TRAMWAYS (1921–22)

466. The route mileage operated upon by the Madras Electric Tramways increased during the year by 1 mile, 1 furlong and 19 yards to a total of 15 miles, 7 furlongs and 126 yards, of which 6 miles, 2 furlongs and 95 yards are double track. The newly-constructed portion is entirely double track. The line equipment is throughout on the overhead trolley system, suspended by side or centre poles. The current is obtained from the Madras Electric Supply Corporation, and the power-station plant is kept in reserve. The rolling-stock consists of 80 motor cars, 20 trailers, 1 special car, 1 road-metal carrying car and 1 watering car ; the average daily number of cars in service was 76 as against 75 in the previous year. No cars were constructed or re-constructed during the year. The car mileage rose from 1,355,808 miles to 1,656,806½ miles, but the number of passengers fell from 20,347,640 to 17,289,772 ; the decrease is probably due to the increasing competition of the motor omnibuses running to and from the business quarters.

CANALS (1921-22)

467. Navigation was carried on as usual on the Dumagudem, Gōdāvari, Kistna, Kurnool-Cuddapah, Buckingham, West Coast and Vēdāranniyam canals. The Chilka lake canal referred to in the previous report was transferred to the Salt Department. Excluding the West Coast canals the total receipts again fell to Rs. 2·64 lakhs or Rs. 0·07 lakh less than in the previous year. The decrease occurred chiefly under the Gōdāvari canals and was due to a smaller revenue being realized under "Annual licence fees" and "Raft fees" owing to the shoaling up of the Dowlaishweram approach channel by floods during the year.

IRRIGATION (1921-22)

[*Statistics of British India, Vol. I, Commercial Statistics—Irrigation*]

Gross expenditure and revenue

468. The expenditure incurred on irrigation works rose, by Rs. 8·31 lakhs, to Rs. 88·96 lakhs, and the revenue derived therefrom, by Rs. 4·12 lakhs, to Rs. 281·17 lakhs. The area charged as irrigated was 7,229,326 acres or 69,241 acres less than in 1920–21.

Irrigation works

469. Works for which capital and revenue accounts are kept were re-classified during the year into (A) Irrigation works and (B) Navigation, Embankment and Drainage works, each class being sub-divided into "Productive" and "Unproductive." Irrigation works "Productive" included all the works under this category mentioned in the previous report with the exception of those that have proved failures—the Nāgavalli river system, the Kurnool-Cuddapah canal and the Barur tank. The capital outlay on these (direct and indirect) fell from Rs. 7·86 lakhs to Rs. 7·59 lakhs and was incurred mainly on the Gōdāvari and the Cauvery delta systems and the Toludur project, the last of which was again the only work of this class under actual construction. In the Gōdāvari delta system the improvements to the Kovvūr-Manjair junction canal, the Ainapur drain and the upper portion of the Yenamadurru drain were in progress. In the Cauvery delta system the improvements to Lawford's straight cut and the construction of a regulator across the Korayār were in progress. The total area under first crop charged as irrigated fell, by 8,562 acres, to 2,949,442 acres, but the area charged under second crop rose, by 4,745 acres, to 445,891 acres. The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 159·74 lakhs and Rs. 35·41 lakhs, respectively, against Rs. 157·47 lakhs and Rs. 29·67 lakhs in the previous year. The net revenue due to improvements was Rs. 82·59 lakhs against Rs. 86·06 lakhs in the previous year, representing a return of 12·74 per cent on the capital outlay of Rs. 6·48 crores as against 13·43 per cent in 1920–21. After deducting interest charges, the profit for the year was Rs. 62·12 lakhs against Rs. 62·23 lakhs in the previous year, and the accumulated profits to the end of the year amounted to Rs. 22·34 crores. Compared with the previous year, the gross revenue showed an increase of Rs. 2·27 lakhs, which occurred chiefly under the Gōdāvari delta, the Pennēr river canals, and the Lower Coleroon anicut systems. The increase under the first two systems occurred mainly under second crop and that under the Lower Coleroon anicut system was principally due to the introduction of re-settlement rates. There was an increase of Rs. 5·74 lakhs under "Working Expenses" which occurred chiefly under the Gōdāvari and the Cauvery delta systems. The increase under the Gōdāvari delta system was due to the special repairs carried out to the Ellore canal. The closing of breaches and the strengthening of the weak parts of river banks accounted for the large increase under the Cauvery delta system. Irrigation works "Unproductive" included all Class II minor works mentioned in the report of last year, as well as protective works and productive works that had proved failures. The capital outlay (direct and indirect) on these works was Rs. 0·40 lakh,

Productive

Revenue

Expenditure under revenue account

Unproductive

incurred chiefly on the Nāgavalli river system and the Kurnool-Cuddapah canal. The area under first crop charged as irrigated fell, by 15,042 acres, to 487,370 acres, and that under second crop, by 19,535 acres, to 90,080 acres.

Revenue

The gross revenue and working expenses inclusive of old irrigation revenue and old maintenance charges amounted to Rs. 21·36 lakhs and Rs. 6·42 lakhs against Rs. 22·13 lakhs and Rs. 5·96 lakhs, respectively, in the previous year. The net revenue due to improvements fell by Rs. 1·21 lakhs. After deducting interest charges, the deficit for the year was Rs. 6·91 lakhs.

Remissions

The remissions granted under "Productive" and "Unproductive" works were Rs. 1,72,251 and Rs. 93,916, respectively, against Rs. 2,10,354 and Rs. 55,823 in the previous year. The areas mainly affected were the Gōdāvari and the Kistna delta systems under the former class and the Pālār anicut system and the Cumbum tank under the latter class.

Navigation works

470. There were three works under "Navigation, Embankment and Drainage works," all unproductive, viz., the Ganjām-Gopalpūr canal, the Buckingham canal and the Vēdāranniyam canal.

Unproductive

The gross receipts and charges amounted to Rs. 81,329 and Rs. 2,59,888, respectively, against Rs. 77,519 and Rs. 2,39,190 in the previous year. There was thus a loss of Rs. 1,78,559 to Government on the working of the canals against Rs. 1,61,671 in 1920–21.

Old Class III works

471. The outlay on Irrigation works for which capital and revenue accounts are not kept, corresponding to the old Class III works, including that incurred by Civil officers and accounted for by the Civil department, was Rs. 32·85 lakhs as against Rs. 29·65 lakhs in the previous year. The area charged as irrigated fell from 3,287,390 acres to 3,256,543 acres and the revenue inclusive of the amount collected by the Public Works Department was Rs. 98·48 lakhs against Rs. 95·74 lakhs in the previous year. A sum of Rs. 6·61 lakhs was remitted as against Rs. 10 lakhs in the previous year.

Tank restoration scheme

The total area coming within the scope of Tank Restoration scheme investigation was 103,750 square miles. During the year an area of 1,961 square miles of minor basins was entered upon and 1,092 square miles investigated, bringing the totals to 89,328 square miles and 82,603 square miles, respectively. Works were completed for 76,165 square miles of the area investigated, were in progress for 4,303 square miles and were not commenced in the balance of 2,135 square miles. Estimates for Government works were sanctioned to the extent of Rs. 4·59 lakhs or Rs. 0·07 lakh more than in the previous year. The total amount sanctioned under this head from the beginning of the operations up to the end of the year was Rs. 158·47 lakhs. The expenditure during the year was Rs. 3·93 lakhs or Rs. 6·15 lakhs, including percentage charges.

Old Class IV works

472. The outlay incurred on Navigation, Embankment and Drainage works for which capital and revenue accounts are not kept, corresponding to the old Class IV works, rose from Rs. 7·17 lakhs to Rs. 7·38 lakhs, but the revenue fell from Rs. 0·94 lakh to Rs. 0·78 lakh.

Investigation of projects

The estimate for the Cauvery reservoir project was still under the consideration of the Government of India pending a settlement of the conference with the Mysore Government. The Vengalapuram project in the Nellore district, the Velgode project in the Kurnool district and the improvements to the Kurnool-Cuddapah canal were also under consideration. In the Ganjām district estimates for improvements to the Girisola channel were revised by the special officer appointed for the investigation of irrigation projects and were submitted to the Chief Engineer for Irrigation. The proposals relating to the Coringa island project were under revision. The estimates for the Pōlavaram island project were submitted to Government. Estimates for fitting higher shutters to the Kistna anicut at Bezwada were under preparation. The Pratur pumping scheme for the irrigation of 10,768 acres in the Tenali and Guntūr taluks by pumping water from the Kistna river was under the consideration of Government. The estimate for making the Nīlambūr river navigable for forest produce was returned to the Superintending Engineer for revision. The estimates for improvements to the Vadavār and the Vīranum tank were under

revision. An estimate amounting to Rs. 3,36,640 for improvements to the lower reaches of the Cauvery from the in-fall of the Ayyavayyanār to the sea was sanctioned.

Miscellaneous

473. The floods of August and November 1921 caused some damage to the rear apron of the Grand Anicut in the Cauvery delta system and an estimate for repairing the damage was under preparation. The right bank of the Korayār at Tirutturaippūndi breached and the breach was immediately closed. Owing to very heavy rains in January 1922 about thirteen supply channels in the Rāmnād district breached and the breaches were closed during the year.

Hydro-electric surveys

474. Rough proposals calculated to ensure the efficient working of the Periyār power scheme were submitted by Sir Alfred Chatterton on behalf of the syndicate. These were examined, and suggestions in regard to the detailed proposals to be submitted were also given. The rights under the concession and licence granted to Messrs. Tata Sons, Limited, Bombay, in respect of the Kundah power scheme were transferred by them to the Nilgiri Power Syndicate. Temporary arrangements for the immediate supply of power to Ootacamund prior to the actual commencement of the works were under consideration. The settlement of the terms of the concessions to be granted in respect of the Pykara and Kathuvadi Ar power schemes was practically concluded. During the year surveys were in progress for the Kolab scheme in Jeypore, the Nāgavalli-Rayagedda scheme in Vizagapatam, the Berijam-Pinjikave and Kodaikānal schemes in the Palnis and the Honeyrock, Yercaud and Nāgalūr-Puttūr schemes in the Shevaroys. For the Kolab scheme a storage of 13,000 million cubic feet with a 120 feet dam at the site selected by Mr. Sneyd was ascertained. Site surveys for the dam and surveys for an alternative site further downstream were nearly completed. For the Nāgavalli-Rayagedda scheme it was found that it would be possible to provide for 570 million cubic feet storage with an 80-feet dam on the latter stream. On the surveys of the Berijam-Pinjikave and Kodaikānal schemes two subordinates were employed alternately for short periods. In the Shevaroys the upper and lower Vanniyār and Vellakadi streams were inspected and it was found that there was no scope for development. The Honeyrock scheme was surveyed, while the Nāgalūr-Puttūr scheme was inspected and the storage capacity was ascertained. The possibilities of utilizing the Yercaud lake were being investigated. The Machkand and Morthana schemes were also inspected.

CHAPTER V

REVENUE AND FINANCE (1921–22)

[*Statistics of British India, Vol. II, Financial Statistics*].

REVENUE AND FINANCE OTHER THAN MUNICIPAL

(*a*) GROSS REVENUE

Revenue and expenditure

475. The following statements give the figures during each of the past two years of the Central and Provincial revenue and expenditure as well as the capital expenditure on State Railways and Irrigation Works not charged to Revenue :—

A.—Central and Provincial Funds—Receipts.

Heads of account.	Central.		Provincial.		Total.	
	1920-21	1921-22	1920-21	1921-22	1920-21	1921-22
	RS.	RS.	RS.	RS.	RS.	RS.
I. Customs	1,92,49,779	2,12,45,365	...	...	1,92,49,779	2,12,45,365
II. Taxes on Income	1,12,57,377	1,37,84,364	59,84,525	39,88,842	1,72,41,902	1,77,73,206
III. Salt	1,45,82,246	1,39,01,764	...	...	1,45,82,246	1,39,01,764
IV. Opium	6,21,121	8,68,487	...	...	6,21,121	8,68,487
V. Land Revenue	3,44,27,234	...	3,44,27,234	7,26,63,447	6,88,54,468	7,26,63,447
VI. Excise	2,69,53,537	...	2,69,53,537	4,88,17,245	5,39,07,074	4,88,17,245
VII. Stamps—						
A. Non-Judicial	34,45,488	...	34,45,489	70,86,802	68,90,977	70,86,802
B. Judicial	54,59,309	...	54,59,309	1,18,98,345	1,09,18,618	1,18,98,345
VIII. Forest	...	...	52,69,141	48,56,960	52,69,141	48,56,960
IX. Registration	...	...	30,61,000	32,55,695	30,61,000	32,55,695
X. Tributes from Indian States.	44,96,521	44,96,521	...	...	44,96,521	44,96,521
XI. State Railways—						
Gross receipts	10,51,83,380	11,17,97,580	...	...	10,51,83,380	11,17,97,580
Deduct—Working expenses.	7,48,36,894	8,50,97,994	...	...	7,48,36,894	8,50,97,994
Net Receipts	3,03,46,486	2,66,99,586	...	...	3,03,46,486	2,66,99,586
XII. Subsidized Companies Government share of surplus receipts Repayments of advance interest other items.	50	328	...	...	50	328
XIII. Irrigation, Navigation, embankment and drainage works for which capital accounts are kept.	(—) 9,78,888	...	(—) 12,52,698	(—) 28,02,849	(—) 22,31,586	(—) 28,02,849
XIV. Irrigation, Navigation, embankment and drainage works for which no capital accounts are kept.	...	...	1,56,758	1,30,812	1,56,758	1,30,812
XVI. Interest	8,37,360	8,31,410	5,08,548	6,19,756	13,45,908	14,51,166
XVII. Administration of Justice ...	...	...	9,78,136	10,80,457	9,78,136	10,80,457
XVIII. Jails and convict settlements.	...	...	8,03,324	9,29,151	8,03,324	9,29,151
XIX. Police	...	...	6,89,000	6,68,374	6,89,000	6,68,374
XX. Ports and Pilotage	...	...	393	915	393	915
XXI. Education—						
A. University	...	...	3,05,171	3,43,382	3,05,171	3,43,382
B. Secondary	...	...	1,22,437	1,35,208	1,22,437	1,35,208
C. Primary	...	...	6,466	6,359	6,466	6,359
D. Special	...	...	37,125	47,099	37,125	47,099
E. General	...	...	5,83,922	1,90,644	5,83,922	1,90,644
XXII. Medical	...	...	6,13,782	3,07,493	6,13,782	3,07,493
XXIII. Public Health	...	...	2,22,541	77,867	2,22,541	77,867
XXIV. Agriculture	...	5,101	3,65,721	3,88,854	3,65,721	3,93,955
XXV. Industries	...	...	19,41,814	9,97,744	19,41,814	9,97,744
XXVI Miscellaneous Departments.	...	36,616	3,31,215	3,03,846	3,31,215	3,40,462
XXVII. Currency	60,908	20,273	13,940	...	74,848	20,273
XXIX. Exchange on transactions with London.	...	...	...	330	...	330
XXX. Civil Works	21,799	25,597	10,11,107	6,46,684	10,32,906	6,72,281
XXXII. Transfers from famine Insurance fund.	...	...	...	...	...	...
XXXIII. Receipts in aid of Superannuation.	88,955	1,46,775	1,69,669	3,74,186	2,58,624	5,20,961
XXXIV. Stationery and Printing ...	17,642	24,111	1,47,892	1,46,705	1,65,534	1,70,816
XXXV. Miscellaneous	12,92,486	69,58,280	6,07,235	3,00,404	18,99,721	72,58,684
Total ...	15,21,79,410	8,90,44,578	9,29,63,733	15,74,60,757	24,51,43,143	24,65,05,335
Contributions and assignments to the Central Government by Provincial Government.	...	3,83,81,000	...	(—) 3,83,81,000	...	...
Miscellaneous adjustments between the Central and Provincial Governments.	(—) 24,23,534	17,37,890	24,23,534	(—) 17,37,890	...	...
Total ...	(—) 24,23,534	4,01,18,890	24,23,534	(—) 4,01,18,890	...	...
Total ...	14,97,55,876	12,91,63,468	9,53,87,267	11,73,41,867	24,51,43,143	24,65,05,335
Loans and advances by Provincial Governments.	...	...	...	15,57,343	...	15,57,343
Loans between Central and Provincial Governments.	...	...	...	10,85,61,628	...	10,85,61,628
Grand Total ...	14,97,55,876	12,91,63,468	9,53,87,267	22,74,60,838	24,51,43,143	35,66,24,306

B.—Central and Provincial Funds—Charges.

Heads of account.	Central		Provincial				Total.	
	1920-21	1921-22	1920-21	1921-22			1920-21	1921-22
				India.	England.	Total.		
EXPENDITURE CHARGED TO REVENUE.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
1. Customs	8,17,480	9,79,824	...	...	...	...	8,17,480	9,79,824
2. Taxes on Income	1,74,361	3,25,910	1,74,361	1,08,637	...	1,08,637	3,48,722	4,34,547
3. Salt	26,82,537	28,69,952	...	...	...	...	26,82,537	28,69,952
4. Opium	...	...	...	...	...	...	...	...
5. Land Revenue	2,53,104	...	1,82,69,179	1,23,57,266	47,030	1,29,04,296	1,85,22,283	1,29,04,296
6. Excise	13,31,601	...	13,31,601	30,69,762	12,940	30,82,702	26,63,202	30,82,702
7. Stamps	2,40,228	...	2,40,226	7,62,330	...	7,62,330	4,80,454	7,62,330
8. Forest	...	...	45,30,486	51,23,270	70,350	51,93,620	45,30,486	51,93,620
9. Registration	...	...	20,97,366	22,60,703	...	22,60,703	20,97,366	22,60,703
10. State Railways	21,03,611	66,19,111	...	...	...	...	21,03,611	66,19,111
11. Subsidized Companies	1,03,423	36,639	...	...	...	...	1,03,423	36,639
12. Miscellaneous Railway Expenditure.	41,558	21,140	...	...	...	...	41,558	21,140
13. Construction of Railways	—60,842	...	...	...	...	...	—60,842	...
14. Interest on works for which Capital Accounts are kept.	15,47,978	...	15,47,978	38,20,911	...	38,20,911	30,95,956	38,20,911
15. Other Revenue Expenditure financed from Ordinary Revenues.	6,880	6,142	36,43,673	39,93,192	...	39,98,192	36,50,553	40,04,334
16. Construction of Irrigation, Navigation, Embankment and Drainage works.	74,162	...	76,117	40,294	...	40,294	1,50,279	40,294
19. Interest on ordinary debt	...	65,36,998	4,73,198	—3,78,097	...	—3,78,097	4,73,198	61,58,901
20. Interest on other obligations	13,45,130	22,40,777	...	58	...	58	13,45,130	22,40,835
22. General administration	...	...	24,46,212	1,31,15,607	2,90,200	1,34,05,807	24,46,212	1,34,05,807
23. Audit	5,60,960	7,13,814	...	...	...	...	5,60,960	7,13,814
24. Administration of Justice	...	...	1,18,64,798	93,33,742	79,760	94,18,502	1,18,64,798	94,18,502
25. Jails and convict settlements	...	...	28,01,199	28,75,585	18,270	28,93,855	28,01,199	28,93,855
26. Police	...	...	1,76,97,158	1,94,96,863	1,70,020	1,96,66,883	1,76,97,158	1,96,66,883
27. Ports and Pilotage	...	...	52,300	53,833	...	53,833	52,300	53,833
28. Ecclesiastical	4,42,025	4,39,690	...	...	...	...	4,42,025	4,39,690
29. Political	73,047	1,56,390	1,07,923	...	...	...	1,80,970	1,56,390
30. Scientific Departments	39,860	67,713	1,04,956	1,46,184	3,540	1,49,724	1,44,816	2,17,437
31. Education	...	...	1,33,00,131	1,41,82,272	47,970	1,42,30,242	1,33,00,131	1,42,30,242
32. Medical	...	...	44,10,210	53,18,417	1,27,760	54,46,177	44,10,210	54,46,177
33. Public Health	...	50,072	23,78,453	26,50,424	13,110	26,63,534	23,78,453	27,13,606
34. Agriculture	...	38,274	21,01,565	24,69,553	49,010	25,18,563	21,01,565	25,56,837
35. Industries	...	...	15,37,916	19,33,924	71,020	20,04,944	15,37,916	20,04,944
36. Aviation	6,150	1,572	...	...	...	...	6,150	1,572
37. Miscellaneous Departments	92,473	3,81,850	6,81,182	9,28,403	3,440	9,31,843	7,73,655	13,13,693
38. Currency	2,70,095	2,79,987	...	...	...	...	2,70,095	2,79,987
40. Exchange on Transactions with London.	...	...	...	10,25,321	...	10,25,321	...	10,25,321
41. Civil Works	2,10,944	4,84,024	1,13,47,446	1,28,34,757	1,42,930	1,29,77,687	1,15,58,390	1,34,61,711
43. Famine relief and Insurance	33,990	...	11,330	10,62,985	...	10,62,985	45,320	10,62,985
44. Territorial and political pensions.	2,75,402	2,76,852	...	...	...	...	2,75,402	2,76,852
45. Superannuation allowances and Pensions.	38,634	2,95,586	38,01,176	45,39,926	26,990	45,66,916	38,39,810	48,62,502
46. Stationery and printing	16,13,861	10,32,515	24,28,360	23,39,445	86,970	24,26,415	40,42,221	34,58,930
47. Miscellaneous	45,535	5,70,659	6,45,135	7,50,122	37,120	7,87,242	6,90,670	13,57,901
Total expenditure charged to Revenue.	1,43,64,187	2,44,25,491	11,01,01,635	12,67,25,689	12,98,430	12,80,24,119	12,44,65,822	15,24,49,610
Surplus (+) or Deficit (—)	+13,53,91,689	+10,47,37,977	—1,47,14,368	...	...	—1,06,82,252	+12,06,77,321	+9,40,55,725
Grand Total	14,97,55,876	12,91,63,463	9,53,87,267	...	...	11,73,41,867	24,51,43,143	24,65,05,335
CAPITAL OUTLAY ON RAILWAY AND IRRIGATION WORKS NOT CHARGED TO REVENUE.								
53. Construction of State Railways.	1,19,05,288	1,58,08,174	...	...	...	...	1,19,05,288	1,58,08,174
55. Construction of Irrigation, Navigation, Embankment and Drainage Works.	7,60,049	...	...	7,18,730	...	7,18,730	7,60,049	7,18,730
Total	1,26,65,337	1,58,08,174	...	7,18,730	..	7,18,730	1,26,65,337	1,65,26,904
Loans and Advances by Provincial Governments.	...	...	...	62,50,566	...	62,50,566	...	62,50,566
Loans between Central and Provincial Governments.	...	...	...	9,85,11,628	...	9,85,11,628	...	9,85,11,628
Grand Total (Disbursements)	2,70,29,524	4,02,33,665	11,01,01,635	23,22,06,613	12,98,430	23,35,05,043	13,71,31,159	27,37,38,708

Including the receipts and charges of the Civil and Public Works Department, but excluding the figures relating to the Army, the Post office and Telegraph department, and the Home Accounts of the Central Government, as well as those relating to capital outlay and debt and remittance transactions, the gross revenue amounted to Rs. 24,65,05,335 or Rs. 13,62,192 more than that of the previous year ; the gross expenditure charged to revenue rose by Rs. 2,79,38,788 to Rs. 15,24,49,610 ; these figures are, however, subject to alteration when the finance and revenue accounts of the Government of India are finally made up by the Auditor-General.

Surplus revenue

476. The surplus amounted to Rs. 9,40,55,725 or a decrease of Rs. 2,66,21,596 from that of 1920–21.

Cash balance

477. The year opened with a cash balance of Rs. 161 lakhs in the Exchange Treasury and in the revenue treasuries, other than those managed by a branch of the Imperial Bank, and closed with a balance of Rs. 117 lakhs.

(*b*) Central Revenue and Finance

General

478. The receipts on account of Central Revenue were less than those of 1920–21 by Rs. 6,31,34,832. The decrease occurred chiefly under Land Revenue (Rs. 344·27 lakhs), Excise (Rs. 269·54 lakhs), Stamps (Rs. 89·05 lakhs), and State Railway earnings (Rs. 36·47 lakhs), partly counterbalanced by increases under Customs (Rs. 19·96 lakhs), Income-tax (Rs. 25·27 lakhs) and Miscellaneous Revenue (Rs. 56·66 lakhs). The net amount transferred from Provincial to Central was Rs. 4,25,42,424 more than in the previous year. The Central expenditure charged to revenue exceeded that in 1920–21 by Rs. 1,00,61,304, the increase being chiefly made up of Rs. 65·37 lakhs under interest on ordinary debt, Rs. 45·16 lakhs under State Railways, and smaller amounts under other heads, partly counterbalanced by decreases of Rs. 15·48 lakhs under Interest on Irrigation Works (for which capital accounts are kept) and Rs. 13·32 lakhs under Excise. The incidence of taxation per head of the population was Rs. 1–5–10·4 against Rs. 1–4–7·2 in 1920–21.

Customs

479. The revenue under customs is subdivided into Sea Customs and Land Customs. The receipts under Sea Customs, exclusive of import duty on salt which was credited to salt, amounted to Rs. 2,07,51,812 against Rs. 1,85,38,529 in 1920–21. The increase of Rs. 22·13 lakhs was the net result of increases of Rs. 21·17 lakhs under import duties and Rs. 2·13 lakhs under export duties and a decrease of Rs. 1·17 lakhs under Miscellaneous Revenue. The improvement under import duties was mainly due to enhanced rates of duty levied from 1st March 1921 and that under export duties was chiefly due to larger exports of rice. Smaller receipts under excise duty on cotton manufactures account for the decrease under Miscellaneous revenue. The receipts under Land Customs fell from Rs. 10,00,730 to Rs. 8,40,994, the decrease being due to the abnormal collections of penalties from gold smugglers which swelled the 1920–21 figure. The incidence of taxation per head of the population was As. 8–2 against As. 7–6 in 1920–21. Refunds and drawbacks during the year amounted to Rs. 3,47,441 against Rs. 2,89,480 in 1920–21. The charges rose from Rs. 8,17,480 in 1920–21 to Rs. 9,79,824 in 1921–22, owing chiefly to the increased compensation paid to the Cochin and Travancore Darbars.

Opium

480. For information about the opium revenue see infra under Excise Administration.

Salt

481. As in last year the season was unfavourable for salt manufacture. A period of intense heat in May was welcomed by the licensees but the heavy rains in November and December 1920 had flooded the southern factories with the result that manufacture commenced late. Then intermittent rains from June onwards retarded manufacture and brought it to an early close. The quantity of salt manufactured in the year dropped from over $12\frac{1}{2}$ million maunds to 12 million maunds. The stock on hand at the beginning of the year had been $10\frac{1}{2}$ million maunds. Adding to this the quantity manufactured (12 million maunds) and the quantity imported ($1\frac{3}{4}$ million maunds) the total comes to about $24\frac{1}{4}$ million maunds. The issues during the year amounted to nearly 14 million maunds and the balance on hand at the end of the year excluding wastage was a little over $9\frac{1}{2}$ million maunds. The stocks on hand being ample many factories remained unworked during the season and some of the new extension licensees found it unprofitable to carry on manufacture. The wholesale excise price of salt showed a slight decrease but this did not benefit the consumer as the retail prices stood at much the

same level as in 1920–21. The course of prices in March when the duty was temporarily raised affords an interesting commentary on the ways of middlemen. Prior to the increase of duty the retail selling price in Madras was As. 1–4 per Madras measure. The increase in duty should have raised this to As. 2–2 but the actual price in March was As. 3 showing that the merchants availed themselves of the opportunity to make additional profits.

482. Of the total quantity of salt manufactured during the year, about $3\frac{1}{4}$ million maunds were Government salt and about $8\frac{3}{4}$ million maunds were excise salt, as against 4 million maunds and 8 million maunds, respectively, in the previous year. The quantity of duty-paid salt imported by sea from the Bombay Presidency fell from 1,520,629 maunds to 1,462,527 maunds and that imported by rail from Bombay and Goa rose from 250,714 maunds to 282,702 maunds. The issues for home and inland consumption of locally-manufactured and imported salt fell from 12,252,769 maunds to 12,202,542 maunds. The quantity issued for export by sea was 679,032 maunds against 37,090 maunds in the previous year. The quantities issued to the French Government and the Travancore Darbar were 71,012 and 502,520 maunds, respectively, against 60,536 and 481,986 maunds in the previous year. The quantity of salt issued for fish-curing purposes fell from 296,158 maunds to 257,530 maunds. The year's revenue amounted to Rs. 1,39,01,764 against Rs. 1,45,82,246 in 1920–21, the decrease being due to a larger percentage of credit sales during the latter half of 1921–22, the duty on which will be realized during the first six months of 1922–23. The incidence of taxation which is calculated with reference to the rate of inland consumption was As. 4–7 as against As. 4–8·3 in 1920–21. The charges rose from Rs. 26,82,537 to Rs. 28,69,952 consequent on the revision of pay of both the gazetted and non-gazetted services.

Income-tax (excluding super-tax and excess profits duty)

483. The net receipts under Income-tax amounted to Rs. 86,48,139 against Rs. 59,84,523 in 1920–21. The increase was mainly due to the fact that the share of the Provincial Government in 1921–22 was only three pies on each rupee brought under assessment under the Income-tax Act, 1918, in respect of which the Income-tax assessed was collected, while in 1920–21 the receipts were equally divided between the Central and Provincial Governments. The incidence of taxation was As. 5–8·9 per head against As. 5–3·7 per head in the previous year. The charges rose from Rs. 1,74,361 to Rs. 3,25,910 owing partly to the additional staff entertained for investigation and assessment work and partly to the share of the Central Government having risen to 75 per cent in 1921–22 from 50 per cent in 1920–21.

Super-tax

484. The net collections from Super-tax rose from Rs. 16,38,605 in 1920-21 to Rs. 44,08,661 in 1921–22. The increase was generally due to more prompt assessments and collection in 1921–22 and to the collection in 1921–22 of the large arrears outstanding at the end of 1920–21. The enhancement of the rates of super-tax also contributed to the increase. The incidence of taxation per head was As. 2-0·8 against 8·2 pies in 1920-21. No special staff was employed during the year for collection purposes.

Excess profits duty

485. The duty was imposed only on the profits of the year 1918–19 but it was not fully realized in 1919–20 and 1920–21 owing to late assessments, the grant of extension of time for payment and the stay of collection pending disposal of appeals. The net collections in 1921–22 amounted to Rs. 7,27,564 against Rs. 36,34,249 in 1920–21. The incidence of taxation per head was 3·7 pies against As. 1–5 in 1920–21. No special staff was employed for the collection of the duty.

Other Central receipts

486. Central Revenue from other sources amounted to Rs. 3,92,44,598 or a decrease of Rs. 6,72,24,289 as compared with the previous year. The decrease occurred chiefly under Land Revenue (Rs. 344·27 lakhs), Excise (Rs. 269·54 lakhs), Stamps (Rs. 89·05 lakhs) and State Railway receipts

(Rs. 36·47 lakhs) partly, counterbalanced by increases of Rs. 56·66 lakhs under Miscellaneous Revenue and of smaller amounts under other heads. The decreases under Land Revenue, Excise and Stamps were due to the fact that the revenue under these heads was shared equally between the Central and the Provincial Government till the end of 1920–21 while it was entirely provincialized with effect from 1st April 1921. The decrease under State Railway receipts was due to an increase of Rs. 102·61 lakhs in working expenses, partly counterbalanced by an increase of Rs. 66·14 lakhs in gross receipts. Larger receipts from Freight-tax mainly accounted for the increase under Miscellaneous Revenue.

Contributions and assignments to Central Government by Provincial Government and miscellaneous adjustments between Central and Provincial Governments

487. These two heads take the place of the old head "Transfers between Imperial and Provincial." The net amount paid to the Central Government by the Provincial Government in 1921–22 was Rs. 4,01,18,890 and it was made up of (*a*) Rs. 348·00 lakhs, the fixed contribution payable to the Central Government under Rule 17 of the Devolution Rules, (*b*) Rs. 35·81 lakhs, the assignment to the Central Government under Rule 15 (2) of the Devolution Rules, (*c*) Rs. 18·10 lakhs, the amount due to the Government of India for 1920–21 in respect of the additional taxation imposed by the Government of India under Income-tax and (*d*) Rs. ·72 lakh being the net amount transferred from Central to Provincial on account of other minor adjustments.

Other Central expenditure

488. The Central expenditure under other heads amounted to Rs. 2,02,49,805 against Rs. 1,06,89,809 in 1920–21. The increase was the net result of an increase of Rs. 45·16 lakhs under State Railways and of Rs. 65·37 lakhs under Interest on Ordinary Debt, and a fall of Rs. 15·48 lakhs under Interest on Irrigation Works for which Capital accounts are kept and of Rs. 13·32 lakhs under Excise and smaller variations under other heads. The increase under State Railways occurred mainly under Interest on Capital contributed by Companies (Rs. 21·28 lakhs) and Annuities in purchase of railways (Rs. 15·43 lakhs). Final adjustment in this Province with effect from 1921–22 of charges on account of interest which were adjusted by the Accountant-General, Central Revenues, caused the excess under Interest on Ordinary Debt. Charges on account of interest on Irrigation Works and the charges under Excise which were shared equally between the Central and the Provincial Government till the end of 1920–21 were entirely provincialized with effect from 1st April 1921.

Capital outlay on State railways

489. The capital outlay on State Railways not charged to Revenue was Rs. 1,58,08,174 against Rs. 1,19,05,288 in 1920–21, the increase being chiefly due to larger expenditure on rolling stock and structural works on the South Indian Railway.

Loans and advances by the Central Government

490. The opening balance under Loans and Advances by the Central Government on the 1st April 1921 was Rs. 1,92,16,860. No advances were made during the year. The repayments amounted to Rs. 6,39,654, the chief items being Rs. 1,96,840 by the Madras Corporation, Rs. 2,29,240 by the Madras Port Trust, Rs. 1,66,374 by the Madras Coast Lights Fund and Rs. 42,883 by the Tanjore District Board Railway. The closing balance of the year was Rs. 1,85,77,206. For the repayment of the old loan of Rs. 14,30,000 taken by the Madras Corporation, a sinking fund has been constituted and the instalment due to the fund during the year (Rs. 28,600) was duly paid. On the 31st March 1922, the sinking fund held Government securities of a face value of Rs. 15,79,600.

(*c*) Revenue and Finance other than Central

Provincial revenues

491. The Provincial accounts opened with a balance of Rs. 58,78,403 on the 1st April 1921 and closed with an adverse balance of Rs. 1,65,802 on the 31st March 1922 as the net result of receipts amounting to Rs. 22,74,60,838 and an expenditure of Rs. 23,35,05,043.

492. The receipts from Land Revenue amounted to Rs. 7,26,63,447 or Rs. 38,08,979 more than those of 1920–21. The increase was generally due to the more favourable character of the season and the collection of arrears. The more important increases in the district collections were in Guntūr (Rs. 5·14 lakhs), South Arcot (Rs. 5·02 lakhs), Bellary (Rs. 4·30 lakhs), Tanjore (Rs. 4·21 lakhs), Salem (Rs. 3·61 lakhs), North Arcot (Rs. 3·59 lakhs), Madura (Rs. 3·54 lakhs) and Rāmnād (Rs. 3·27 lakhs). The incidence of taxation per head of the population amounted to Rs. 1-11-6 against Rs. 1-10-8 in 1920–21 and was highest in the districts of Kistna and Guntūr and was lowest in Vizagapatam. The charges were Rs. 1,29,04,296 against Rs. 1,82,69,179 in the previous year. The decrease is mainly due to the fact that expenditure on District officers and their establishments which was divided between "Land Revenue" and Administration of Justice in the proportion of 7 : 3 till the end of 1920–21 was debited to "22. General Administration" with effect from 1st April 1921. **Land revenue ***

493. For information about Excise revenue, see infra under Excise Administration. **Excise ***

494. The revenue from Stamps amounted to Rs. 1,89,85,147 against Rs. 1,78,09,595 in the previous year. The increase occurred chiefly under Judicial stamps and was due to increased litigation. The incidence of taxation per head rose from As. 6-9·7 to As. 7-2·1. The charges rose from Rs. 4,80,454 to Rs. 7,62,330, the increase being chiefly due to additional payments made to contractors in England for stamps supplied by them on account of the increased cost of paper and other materials and labour. **Stamps ***

495. The receipts from Income-tax amounted to Rs. 39,88,842 against Rs. 59,84,525 in the previous year. The charges fell from Rs. 1,74,361 in 1920–21 to Rs. 1,08,637 in 1921–22. **Income-tax**

496. The revenue from Forests amounted to Rs. 48,56,960 against Rs. 52,69,141 in the previous year. The decrease occurred mainly under "Timber and other produce removed from forests by consumers or purchasers"; the main causes of the decrease were the suspension of operations in Nīlambūr owing to the Māppilla rebellion, the opening of forests to free grazing in Kurnool and Anantapur owing to the unfavourable season and the lack of demand for tanning materials. The charges rose from Rs. 45,30,486 to Rs. 51,93,620. Expenditure on the saw-mill at Russellkonda, the purchase of tools in connexion with the Chenat Nayar operations, the employment of the sanctioned strength of foresters and forest guards under the reorganization scheme and the formation of two additional circle officers mainly accounted for the increase. **Forests**

497. The receipts under Registration rose from Rs. 30,61,000 to Rs. 32,55,695 and the charges from Rs. 20,97,366 to Rs. 22,60,703. **Registration**

498. Excluding the West Coast canals, the total receipts amounted to Rs. 2·64 lakhs or Rs. 0·07 lakh less than in the previous year. **Canal revenue**

499. The Provincial receipts under the remaining heads amounted to Rs. 48,93,421 and were less than those in the previous year by Rs. 34,70,077. The decreases occurred chiefly under Irrigation Works for which Capital accounts are kept (Rs. 15·50 lakhs), Industries (Rs. 9·44 lakhs), Education (Rs. 3·33 lakhs), Civil Works (Rs. 3·64 lakhs), Miscellaneous revenue (Rs. 3·07 lakhs) and Medical (Rs. 3·06 lakhs). The decrease under Irrigation Works was caused by an increase in working expenses due partly to **Other Provincial receipts †**

* The receipts from Land Revenue and the receipts and charges under Stamps and Excise (including the realization of opium revenue by the Excise Department) were shared equally between Central and Provincial, till the end of 1920-21. With effect from the 1st April 1921, all these were completely provincialized. The comparison made here is in respect of the total revenue and expenditure.

† Excludes adjustments between Central and Provincial which have been dealt with in the Central Section.

the extensive breaches in the Cauvery Delta caused by the floods of November 1920 and January 1921 and partly to the entire provincialization with effect from 1st April 1921 of these charges which were equally divided between Central and Provincial before that date. A refund of Rs. 10·07 lakhs to the Central Government, being the sale-proceeds originally credited to Provincial revenue of the reserve stock of quinine maintained by the Government of India, accounts for the decrease under Industries. The decreases under other heads were chiefly due to refunds by local bodies in 1920-21 of unspent balances of Provincial grants given to them in previous years.

Expenditure on famine relief *

500. The expenditure on famine-relief measures in 1921–22 amounted to Rs. 10,62,985 against Rs. 45,320 in 1920–21 and was incurred chiefly in the districts of Kurnool, Bellary and Anantapur. For further particulars vide Chapter IV—Production and Distribution—Weather and Crops.

Famine Insurance fund

501. Under Rule 29 and Schedule IV of the Devolution Rules, the Provincial Government is required to make in every year with effect from 1921–22 a provision of Rs. 6·61 lakhs in the budget for expenditure upon relief of, and insurance against, famine. The amount is to be expended only upon the relief of famine or the construction of Protective Irrigation Works or other works for the prevention of famine. Any portion which is not required for these purposes is utilized in building up a Famine Insurance Fund. The balance at the credit of the fund will be regarded as being invested with the Central Government, which will pay interest on it, and it will be available for application when necessary to any of the objects mentioned above and also to the grant of advances to cultivators. As the expenditure on famine-relief measures in 1921–22 exceeded Rs. 6·61 lakhs, there was no surplus for transfer to the fund.

Other Provincial expenditure

502. The expenditure in the Provincial section under the heads other than those already dealt with amounted to Rs. 10,26,48,846 and was more than that of the previous year by Rs. 1,92,01,760. Increases amounting in all to Rs. 2,26,45,042 appeared under eighteen heads and were partly counterbalanced by decreases amounting to Rs. 34,43,282 which appeared under five heads. The more important increases occurred under General Administration (Rs. 109·60 lakhs), Interest on Outlay on Irrigation Works for which Capital accounts are kept (Rs. 22·73 lakhs), Police (Rs. 19·70 lakhs), Civil Works (Rs. 16·30 lakhs), Medical (Rs. 10·36 lakhs) and Exchange (Rs. 10·25 lakhs). The increase under General Administration was due partly to the expenditure formerly divided between Land Revenue and Administration of Justice being debited to this head (vide the paragraph relating to Land Revenue) and partly to the enlargement of the Legislative Council and the additional appointments sanctioned as a result of the Reforms Scheme. Till the end of 1920–21 interest was calculated on the Irrigation Outlay incurred from Central Funds only and the interest charges were equally divided between Central and Provincial. Consequent on the provincialization of Irrigation Works with effect from 1st April 1921, interest is now calculated on the entire Capital Outlay on Irrigation Works, including the outlay from Provincial funds and the amount is debited to the head "14. Interest on Works for which Capital accounts are kept" by deduction from charges under the head "19. Interest on Ordinary Debt" in the Provincial accounts. This accounted for the bulk of the increase under Interest on Irrigation Works for which Capital accounts are kept. The revision of pay of the subordinate police officers with effect from 1st March 1921 and larger expenditure under Travelling Allowance and Contingencies were responsible for the increased figure under Police. The increase under Civil Works was mainly due to grants paid to local bodies for the maintenance of trunk roads. The revision of pay of officers of the Provincial

* The charges under this head were shared in the proportion of three-fourths and one-fourth between Central and Provincial till the end of 1920-21. They were entirely provincialized with effect from 1st April 1921. The total expenditure is taken for the purpose of comparison.

Medical Service with retrospective effect from 1st April 1920 and a larger expenditure on hospitals and dispensaries contributed to the increase under Medical. The increase under Exchange represents the loss by exchange on the net expenditure of the Provincial Government in England under non-commercial major heads. The decrease in expenditure occurred mostly under "Administration of Justice" (Rs. 24·46 lakhs) and Interest on Ordinary Debt (Rs. 8·51 lakhs) and was due to the causes given above under "General Administration" and Interest on Outlay on Irrigation Works.

Loans and advances by the Provincial Government

503. The Provincial Advance and Loan account (including loans to local boards for railway construction) opened with a balance of Rs. 1,09,85,882 on the 1st April 1921 and closed with a balance of Rs. 1,56,79,104 ; advances amounted to Rs. 62,50,566 and repayments to Rs. 15,57,344. Ryots received advances to the extent of Rs. 23,16,553 as against Rs. 14,47,303 in the previous year, the increase being due to the unfavourable character of the season. The Zamindar of Kangundi received a loan of Rs. 33,537 for the survey of the zamindari. A loan of Rs. 11,00,000 was granted to the Madras Corporation for the water-supply scheme and for the construction of elementary school buildings. The Madras Port Trust received a loan of Rs. 7,00,000 for harbour works. The Madras City and Suburban Improvement Trust borrowed Rs. 2,01,980. The loans granted to mufassal local boards and municipalities amounted to Rs. 10,86,440. Advances to the extent of Rs. 1,40,341 were sanctioned for the acquisition of house-sites for Ādi-Drāvidas.

504. Prior to 1st April 1921 the amounts required for granting these loans were placed at the disposal of the Provincial Government by the Central Government and interest was paid to the Central Government on this account at (i) 3½ per cent on the mean between the outstandings at the commencement and at the close of the year in respect of loans sanctioned prior to 1st October 1916, (ii) 4½ per cent on the mean between similar outstanding balances of loans sanctioned between 1st October 1916 and 31st March 1917 and (iii) 5½ per cent on the mean between similar outstanding balances of loans sanctioned on or after 1st April 1917. The Provincial revenues were credited with the full amount of interest received from parties on these loans and advances, and were debited with any advances which were irrecoverable. Under the Reforms Scheme, the amount owing to the Government of India by the Provincial Government on 1st April 1921, on account of advances made from the Provincial Loan Account, was treated as an advance to the Provincial Government from the revenues of India and carried interest at a rate calculated on the average rate carried by the total amount owed to the Government of India on this account on 31st March 1921.

Loans between Central and Provincial Governments

505. The amount advanced to the Provincial Government on account of the outstanding balance of the Provincial Loan Account on 1st April 1921 was Rs. 1,09,85,882, repayable in annual instalments of Rs. 9,50,000. The first instalment of Rs. 9,50,000 was paid to the Central Government in 1921-22. The rate of interest carried by this advance is 4·51 per cent. A sum of Rs. 8,75,25,746, being the capital expenditure incurred by the Government of India on Irrigation Works to the end of 1920-21, was also treated as an advance to the Provincial Government consequent on the provincialization of these works with effect from 1st April 1921. This advance carries interest at the rate of 3·3252 per cent in the case of outlay up to the end of the year 1916-17, and at the average rate of interest paid by the Government of India on loans raised in the open market since the end of 1916-17 in the case of outlay incurred after that year. Advances amounting to Rs. 1,10,00,000 and carrying interest at the rate of 6½ per cent were also obtained by the Provincial Government from the Government of India in 1921-22 to meet miscellaneous expenditure.

506. The following table summarizes the transactions of funds raised from special sources and devoted to special objects and not to the general purposes of administration (Central and Provincial) :—

Name of the fund.	Opening balance on 1st April 1921.	Receipts, 1921-22.	Charges, 1921-1922.	Closing balance on 31st March 1922.	Invested balance at credit of the fund.	Remarks.
	RS.	RS.	RS.	RS.	RS.	
1. Bhadrachalam-Nugur Special Fund ...	13,911	8,744	6,936	15,719	...	
2. Irrigation Cess Fund ...	53,364	60,435	59,218	54,581	...	
3. Port and Marine Funds—The Madras Ports Fund.	22,028	1,78,420	1,68,158	32,290	44,200	
4. The Minor Ports Fund ...	78,300	6,03,779	3,87,872	2,94,207	3,96,700 (a)	(a) Exclusive of securities pledged with the Imperial Bank.
5. Pilotage Funds (outports).	6,276	14,002	12,641	7,637	1,75,000	
6. Landing and Shipping Funds	4,50,732	10,24,955	7,93,190	6,77,497	5,72,800	
7. The Madras Coasts Lights Fund	1,56,676	2,67,616	3,67,478	56,814	60,000	
8. Cantonment Funds ...	1,01,983	6,64,439	6,05,108	1,61,314	...	
9. Civil Hospital Fund, Secunderabad	5,749	1,34,161	1,29,101	10,809	...	
10. Light Keepers' Recreation and Benefit Fund ..	4,957	5,525	7,989	2,493	9,000	
11. University Fee Fund ...	62,519	6,25,604	6,28,426	59,697	9,86,800 (b)	(b) Rs. 8,46,800 in Govt. securities, 1,40,000 in treasury bills. 9,86,800
12. Kumbakonam College Hostel Fund	1,153	14,710	14,540	1,323	...	
13. Mrs. A. V. Narasinga Rao's College Fund	13,883	45,805	46,136	13,552	1,00,100	
14. Hyderabad Residency Bazaar Fund, Secunderabad	1,61,990	1,43,587	2,40,135	65,442	...	
15. Local (Abkari) Fund, Secunderabad	1,25,214	11,21,523	9,00,014	3,46,723	...	

507. For information about Local Funds constituted under the Local Boards Act, see supra Chapter III—Protection—Local Boards Administration.

MUNICIPAL REVENUES

508. See supra Chapter III—Protection—Municipal Administration (Mufassal), and Municipal Administration (City of Madras).

EXCISE ADMINISTRATION

[*Report on the administration of the Abkāri Department for the year 1921-22*]

General

509. No change in the territorial administration falls to be recorded during the year. The period was the most trying in the whole history of the department. Temperance reform was one of the catch-words of the non-co-operators' programme. In the case of a certain proportion of Gandhi's followers there was doubtless a genuine desire to raise the moral tone of the lower castes. But to the large hooligan element this form of propaganda offered a promising prospect of bullying, blackmail and arson. Nor were they slow to take advantage of it. The mass of the toddy renters, illiterate and impressionable men, found their occupation temporarily gone ; many ryots through political inclination or fear refused to give trees for tapping ; the *habitués* of the liquor shops were bullied or cajoled out of entering ; and in not a few cases toddy spathes were cut and shops were burnt down. The sales were picketed and actual violence was not unknown. As far as human efforts could go, Revenue and Abkāri Officers strove to calm the renters' fears and to procure the essential trees, and Government issued a strongly-worded order declaring their intention of crushing all unlawful methods. That the anti-drink campaign was predominantly a political war-cry was abundantly proved by the comparative immunity of the renters and consumers which followed

the gradual decrease of enthusiasm for the non-co-operation cause in 1922. But as far as the 1921-22 revenue was concerned the damage was done. The futility of this campaign as a deterrent was seen in the immediate increase in illicit drinking. The size of the jurisdiction of Revenue and Abkāri Officers prevents continual close supervision; and in a country where, if he be so inclined, every man's tree is his public house, illicit methods as a matter of course followed the unnatural suppression of the constituted organization. The only material result was a serious loss to Government which they could ill-afford.

Country spirits

510. With the exception of certain Agency tracts, the whole of the Presidency was under the contract distillery system. In the low-duty areas of the South Arcot district adjoining Pondicherry, the duty on country spirits was raised from Rs. 5 to Rs. 6-4-0 per proof gallon. In other areas there was no change. The number of shops was further reduced from 6,008 to 5,874 and licit consumption fell from 1,723,868 proof gallons to 1,644,417 proof gallons, being 0·04 proof gallon per head of population. The decrease was due to the unfavourable season in some districts and to the activities of political agitators in others. The total revenue from country spirits fell, by Rs. 20·60 lakhs, to Rs. 212·57 lakhs. The strength of liquor prescribed for sale was 35° U.P., the experiment of issuing 60° U.P. liquor in certain shops at a preferential rate of duty having been abandoned, with effect from 1st April 1921, after three years' trial. This experiment was devised to encourage the consumption of weaker liquor, but it failed in its object, and the indications were that it was tempting toddy drinkers to abandon toddy in favour of arrack.

Toddy

511. The tree-tax system was further extended during the year in the Agency Division and is now in force throughout the Pōlavaram taluk, in 133 villages of Yellavaram, in 113 villages of Chōdavaram and in portions of the Gudem taluk. An attempt is being made to introduce the sweet-toddy industry among the Koyas of the Pōlavaram and Yellavaram taluks, and concurrently with this scheme, with effect from 1st October 1921, the sweet-toddy rules were introduced in the areas of the Agency Division which are under the tree-tax system. The tree-tax was enhanced by 25 per cent in the Tinnevelly, Rāmnād, Madras and Chingleput districts, with effect from 1st October 1921. The number of shops was still further reduced by 34. The total revenue under toddy fell, by Rs. 37·17 lakhs, to Rs. 219·32 lakhs. There was a decrease of Rs. 25·76 lakhs under rentals and of Rs. 11·39 lakhs under tree-tax. The number of trees tapped up to July 1922, expressed in terms of coconuts, i.e., taking two coconuts as equivalent to three palmyras or three dates or one sago, was 20·30 lakhs as compared with 22·75 lakhs in 1920-21. The licit consumption per head on the basis of the 1921 census figures was roughly 2·33 gallons against 2·68 gallons in the previous year (which was based on the figures of the 1911 census).

Foreign liquor

512. Following on the increase from Rs. 11-4-0 to Rs. 18-12-0 per proof gallon with effect from 1st March 1921, the duty on both imported and locally-made foreign liquors was further raised from Rs. 18-12-0 to Rs. 21-14-0 per proof gallon with effect from 1st March 1922. The quantity of foreign liquor imported by sea decreased by 72,807 gallons owing to the enhancement of tariff duty. The quantity of foreign spirits locally manufactured was 16,944 proof gallons against 37,779 proof gallons in the previous year. The total issues of beer from the local breweries rose from 626,733 gallons to 656,224 gallons, the exports to places outside the Presidency being only 4,889 gallons. The imports from Bangalore amounted to 50,555 gallons. The issues of locally-made rectified spirits increased from 19,784 gallons to 28,933 gallons.

Opium

513. Six hundred and four shops were sold for the year against 603 in the previous year. The issues within the Presidency decreased from 36,239 seers to 34,757 seers, due chiefly to the enhancement of the issue price from Rs. 50 to Rs. 60 a seer. The revenue credited to "Opium" and the gain on sale-proceeds credited to "Excise" amounted to Rs. 8·68

lakhs and Rs. 17·48 lakhs, respectively, against Rs. 6·21 lakhs and Rs. 16·23 lakhs in the previous year. The amount of shop rentals and miscellaneous revenue credited to "Excise" was Rs. 9·40 lakhs against Rs. 10·20 lakhs in 1920–21. The total opium revenue thus realized by the Excise Department increased from Rs. 32·64 lakhs to Rs. 35·56 lakhs. The incidence of taxation per head of the population was one anna. The charges amounted to Rs. 7,397 and exceeded those of year last by Rs. 968. The average consumption per head of population was 0·064 tola.

Intoxicating drugs

514. Four hundred and four shops were sold against 402 in the previous year. Consumption fell from 44,735 seers to 40,596 seers, i.e., from 0·085 tola per head of population to 0·077 tola. The number of cocaine licences increased from 149 to 163, the quantity consumed being about 61 ounces.

Finance

515. The total abkāri revenue fell from Rs. 517·14 lakhs to Rs. 461·29 lakhs, the decrease being chiefly due to the temperance and the non-co-operation movements. The incidence of taxation per head of the population was Rs. 1-1-6 against Rs. 1-3-10 in the previous year. The charges amounted to Rs. 28·31 lakhs against Rs. 24·86 lakhs in 1920–21, the increase being mainly due to the revision of pay of the gazetted and non-gazetted services.

Offences

516. The number of recorded offences against the abkāri laws fell from 14,742 to 14,718. Illicit distillation cases, however, increased from 1,408 to 1,430. The chief increase occurred in the Ceded Districts including Kurnool. In these districts there was a heavy decrease in the consumption of licit liquor, consequent on the activities of the non-co-operation agitators, but the increase of illicit cases detected shows that there was probably no reduction in the consumption of liquor. There is similar evidence from other districts. Cases of illicit manufacture of toddy also increased from 5,191 to 6,619, the highest figure on record since 1905. The increase, which is distributed throughout the Presidency, was due to the restrictions in facilities for the supply of licit toddy owing to the refusal of the tree owners to lease trees for marking, and to the belated opening of shops during the current lease in areas in which the non-co-operation movement was strong. Though the number of convictions under the Opium Act fell from 240 to 176 the demand for opium for export to Ceylon, Burma and the Straits Settlements continued unabated and was met by the surreptitious supply of licit opium collected from the licensed shops in the Presidency and by opium smuggled from Mysore, Travancore and Cochin. Several seizures were made during the year involving large quantities, the largest being 32½ seers.

CHAPTER VI

VITAL STATISTICS AND MEDICAL SERVICES

DETAILS OF CENSUS

Previous history

517. The first estimate of the population of the Presidency was made in 1822, and, after a second enumeration in 1836–37, quinquennial returns were made from 1851 to 1871, when the first imperial census was held on a systematic basis. It is of interest to note that the official increase of population between 1822 and 1871 was from 13½ millions to 31¼ millions—an increase probably due as much to the inaccuracy of the earlier enumeration as to the beneficent effects of British rule. The census of 1881 showed that the Presidency had lost about 3½ millions in the great famine of 1877–78. The next decennial return gave an increase of 15·6 per cent, while the 1901 and 1911 figures showed an increase of 7·2 and 8·3 per cent, respectively.

The recent census

518. The sixth imperial census was taken on the 18th of March 1921. To aid the convenience of the enumerators and to avoid abnormal movements of the population, it is desirable to select for the enumeration a moon-lit night and a date which does not clash with any of the great festivals of the Presidency. For this latter reason, the Government of India consented to the changing of the date from February, the time of the Mahamakham festival at Kumbakōnam, to March. In view of certain local difficulties, the enumeration in some areas had either to be held on the morning following the appointed night or had to be spread over a number of days. Malabar and certain hilly tracts are examples of the former procedure; and in such places as the Agency and the Laccadive Islands, where the scattered nature of the houses and the lack of literate enumerators prevents synchronous enumeration; the best that can be done is to make a record of the normal population of the villages, which inevitably differs, it may be only slightly, from the actual figure of the enumeration night. By order of the Government of India, an improvement was effected in the enumeration of travellers and railway employees. At previous censuses the railway authorities had worked independently of the district organization; in 1921 the stations were constituted into circles and the station officials were thus given the same preliminary training as the district staff, with satisfactory results.

Method

519. The unit of the census system is the "block," consisting of roughly 25 houses, in charge of an enumerator. Each collection of blocks becomes a "circle," and a number of circles form a "charge," controlled by a revenue inspector or a municipal chairman, with whose respective jurisdictions the charges were, in rural and urban areas, usually identical. Smooth working on the actual enumeration date is ensured by preliminary registration, when the enumerator goes his rounds and enters details of the persons found at that time, leaving over for the fixed date only a formal roll-call and the few deletions or additions that are then necessary. Next morning the supervisor collects his enumerators and, compiling an abstract for his circle from their figures, sends it quickly to the Tahsildar of the taluk, who in turn sends the abstract for his taluk to the Collector of the district; the latter then wires the provisional totals to Madras and to Simla. At the recent census, the provisional results for the Presidency were published within

5½ days of the enumeration, and the figures differed by only ·006 per cent from the results finally tabulated. The details from the enumeration schedules were then copied on to slips in the nine central offices scattered throughout the Presidency, where the slips were sorted in accordance with the requirements of the various imperial tables and the tables were compiled therefrom. The clerks in the offices, apparently seized with the prevailing strike fever, went on strike at Madras, Berhampur and Bellary, but the firm attitude of the superintendents won the day, and before long the disgruntled clerks gave in and begged to be reinstated. The last imperial table was sent to the Press within fourteen months of the date of enumeration, in spite of the disorganization caused in the Malappuram office by the outbreak of the Māppilla rebellion.

Cost of the census

520. Two sets of accounts are maintained for the census operations—a departmental account showing every connected item of expense, and a treasury account which allows for such rebates as the salaries of permanent Government servants temporarily employed on census work. The figures given in these accounts up to the end of July 1922—Rs. 4·82 lakhs and Rs. 3·94 lakhs respectively—are liable to revision on account of subsequent recoveries and adjustments, but the final figures may be estimated at Rs. 5·15 lakhs and Rs. 4·27 lakhs respectively. The increase in the standard of wages and the price of paper and printing inevitably raised the cost to almost double that of the 1911 census.

Area and population

521. During the last decade there has been no change in the boundaries of the Presidency, and the slight decrease in area since the last census—from 142,330 to 142,260 square miles—is presumably due to excess measurements corrected at subsequent surveys. Internally, the most notable change has been the formation of the Agency division out of the old Agency tracts of the Vizagapatam, Gōdāvari and Ganjām districts. Space forbids the detailing of the comparatively unimportant district boundary alterations and the constitution of new taluks.

522. The total population of the Presidency on the date of enumeration was 42,794,155, an increase of 923,995 or 2·2 per cent over the previous figure. This includes the population of the small States of Sandūr and Banganapalle ; the Pudukkōttai State authorities are publishing their own report, but the figures of that State are included in the Presidency total. The Travancore and Cochin Darbars hold their own census. The percentage increase is the lowest recorded since 1881, when the people were suffering from the effects of the terrible famine of 1877–78. The table in the margin gives the actual and percentage variation since 1871. Of the individual districts, Kistna, Gōdāvari, the Nilgiris, Anjengo and Tinnevelly alone show an increase of over 6 per cent. Bellary is the only district which shows a serious decrease ; its loss of 11 per cent is presumably due to the bad monsoon of 1918–19 and consequent emigration. During the decade there have been several physical and other factors to which can be attributed the small expansion of the population. Although the monsoons as a whole were adequate, the disastrous failure of the 1918–19 season, especially in the Deccan, the most sensitive area in the Presidency, more than annulled the good effects of several favourable seasons. The universal shortage of food-supplies consequent on the war led to a serious rise in prices during the latter half of the decade, and the inevitable interval between the rise in prices and the increase in wages caused considerable distress among the poorer classes. This rise is best illustrated by the market figures for rice, the staple grain of the greater portion of the Presidency ; the average figure for the fifteen years ending with 1910 was 10·2 Imperial seers of rice per rupee, while for the 1911—20 decade the corresponding figure was 7·2 seers per rupee ; by 1920 the purchasing power of the rupee

Date of census.		Population.	Percentage variation.
1871	...	31,636,276	...
1881	...	31,181,940	– 1·6
1891	...	36,064,408	+15·7
1901	...	38,653,558	+ 7·2
1911	...	41,870,160	+ 8·3
1921	...	42,794,155	+ 2·2

Economic factors

had fallen to 4·6 seers. But the most destructive factor of the decade under view was the influenza scourge of 1918. Actual figures confirm the estimate made by the Sanitary Commissioner at the time, that about 600,000 persons were carried off by the epidemic in the last half of that year. Nor can this figure be taken as the sum total of the evil effects of the visitation. A comparison of the death-rate by age-periods proves the truth of the prevalent belief that the epidemic was particularly fatal to persons in the prime of life. The effect of this phenomenon on the birth-rate of succeeding years is obvious and is clearly seen in the statistics for 1919 and 1920.

Infantile mortality

523. The figures of infantile mortality exhibit two striking features—the heavy death-rate of the Presidency as a whole, and the remarkable variation between individual districts. The death-rate per mille of male and female children under one year of age has averaged 218·6 and 186·0 respectively during the decade, and it is regrettable to find that Madras City shows, in 1920, rates of 290 and 275 as against the Presidency average of 173 and 146 for the same year. Again, that infant welfare is not necessarily the consort of general enlightenment is all too clearly seen in the fact that the districts showing the heaviest rate of infantile mortality are precisely those which are in other respects considered to be among the most advanced in the Presidency—Madras, Chingleput, the Nilgiris, Tanjore and Tinnevelly.

Emigration

524. The statistics of immigration and emigration furnish some interesting facts. Although complete returns have not been received from all the countries to which Madrasis are wont to migrate, the available figures show that 917,000 Madras-born persons were enumerated in other provinces of India and 814,000 in countries outside India. On the other hand, only 210,000 of the present inhabitants of Madras were born elsewhere. It appears then that, on the balance of immigration and emigration, Madras has lost over $1\frac{1}{2}$ millions of her population. About half of the immigrants come from the bordering Native States, while over half of the emigrants from Madras have made their way to these same States. Ceylon absorbs 55 per cent of the overseas emigrants, and the Federated Malay States follow with about 29 per cent. The vast majority of these persons are of the coolie class.

Density

525. The mean density of the Presidency as a whole is 297 persons to the square mile. In this respect Madras stands fourth among the great provinces of India, with Bengal, the United Provinces and Bihar and Orissa above her. Of the natural divisions, the wild Agency tract is, as might be expected, by far the lowest. The "East Coast South" division—Tanjore, Trichinopoly, Rāmnād, Madura and Tinnevelly—leads the way with an average density of 442 persons to the square mile. The Presidency figure has advanced by 6 during the last decade. Leaving out of account the abnormal areas of Madras City and the tiny district of Anjengo, Tanjore is the most densely populated district, with an average density of 624 persons per square mile; Gōdāvari (578), South Arcot (551), and Malabar (535) follow next in order. But these figures take account of the total area of each district, including in many cases stretches of hills and forests. For purposes of comparison it is much more illuminating to consider the density in relation to the area of land available for cultivation. If this standard be adopted, it will be found that Tanjore drops to fifth place, with Malabar leading. A perusal of the taluk units shows that, compared with the last census, a smaller proportion of the population now lives in the more sparsely populated taluks. Of the individual districts, Malabar is easily the largest in population, with a total of 3,098,871 souls, followed by Tanjore and South Arcot with 2,326,265 and 2,320,085 respectively. The Nilgiris, hardly a normal district, is last with a population of 126,519 persons.

Cities, towns and villages

526. In this Presidency, the possession of a population of 50,000 inhabitants is taken as the criterion of cityship for the purposes of the census. A "town" is defined as "A municipality or cantonment or other

continuous collection of houses inhabited by not less than 5,000 persons which the Census Superintendent may consider fit to be treated as a town." The Government of India adopts the higher standard of 100,000 persons for cities ; according to this latter standard, only three cities are to be found in the Presidency—Madras, Madura and Trichinopoly. But by the local standard there are seventeen cities. Towns number 300, of which there are 18 which were expected to fulfil the requisite condition of containing 5,000 inhabitants, but which, from a variety of causes, failed to come up to the minimum. Of the three cities, Madras and Madura show an increase of 1·6 and 2·8, respectively, while Trichinopoly has lost 2·5 per cent of its population. The remarkable falling off in the expansion of Madras which came to light at the last census has continued in the decade under review.

527. The striking contrast between the city life of agricultural Madras and that of industrial England is seen in the comparative proportions of town-dwellers ; the urban population per mille of the inhabitants is 781 in England and only 124 in Madras. This last figure is an increase on the 118 of the last census. Among the Indian provinces, Madras ranks second to Bombay in this respect. There is no sign at present of any decided townward movement of the population, notwithstanding the wider spread of education, which tends, in European countries, to draw the younger generation from the placid calm of a rural existence to the bustle of city life. It is a notable fact that urban life apparently appeals more to the Tamil than to the other peoples of the Presidency. The figures collected of the number and size of villages are of little real practical value ; the term " village" may denote anything from the few mud huts of an Agency hamlet to the substantial collection of two or three hundred houses which make up the Tamil revenue unit ; and in every district recent administrative economy has led to the amalgamation of villages ; thus little can be gathered from the paper decrease in the number of villages in the Presidency.

House room

528. The census figures show that there is now, roughly, one house for every five persons in the Presidency. The total shows an increase of 6·3 per cent over the 1911 figure, whereas the population has risen by only 2·2 per cent. In the towns alone there is an improvement of 11·7 per cent, and, as it is in the urban areas that overcrowding is most prevalent and most pernicious, the figure seems to point to an improved standard of living.

Religion

529. The great difficulty confronting the census enumerator in collecting details for his returns of religion is that the terms " Hindu " and " Animist " are unfamiliar to the great mass of the uneducated villagers. And, even when the details have with difficulty been gathered, the statistician is faced with the impossibility of distinguishing between Animism and the lower forms of Hinduism ; for there can be no doubt that Animism enters largely into the creed of the lowest grades of Hindu society. That the number of " Animist " entries in the schedules depends largely on the caprice of the enumerator is clearly seen in the returns of certain Agency tribes ; of the Gadabās, 6 per cent were Animists in 1911, but by 1921 the proportion had shot up to 47·4 per cent. The figures for the Presidency must therefore be viewed with a certain amount of caution. There has been very little change in the relative strength of the main religions ; what there has been is apparently in the nature of an increase of Christianity and Muslimism at the expense of Hinduism and Animism. Of every hundred persons in Madras, 89 are Hindus, 7 are Muhammadans, 3 are Christians and one is an Animist. The number of Christians has risen by 14·2 per cent, that of Hindus by 1·9 per cent and that of Muhammadans by 3·7 per cent, while Animists and "others" have decreased by 9·4 and 3·7 per cent, respectively. Malabar, with its large Māppilla element, is the only district which contains less than 70 per cent of Hindus. The Muhammadan faith claims less than 10 per cent of the population in all districts except in Malabar, South Kanara,

the Deccan area, and Madras. Statistics prove that the Sunnis (93·6 per cent) form the vast majority of the Muhammadan population. Christianity has progressed most in the Circars, but Tinnevelly still contains the largest Christian population of any district. Roman Catholics have increased by 10 per cent and Anglicans by 9 per cent. It is interesting to note that the adherents of the Salvation Army, which does extensive work in the reclamation of criminal tribes, have increased by 50 per cent. Of the less widespread creeds, Buddhism has almost doubled in strength, although its adherents still number little more than one thousand, and the number of Jains has fallen from 27,000 to about 25,500.

Sex

530. The census returns reveal an excess of 593,839 females over the males of the Presidency, the actual proportion of females to every thousand males being 1,028—a very slight decrease from the 1,032 of the 1911 census. The preponderance of females is more marked in Madras than in any other province of India; in fact, of the other provinces, only the Central Provinces and Bihar and Orissa show any trace of such a preponderance. The proportion of females has increased in only seven of the districts, and in the majority of cases emigration is evidently the cause. Elsewhere, the fall in the number of females can only be attributed to the large number of female deaths during the influenza epidemic of 1918 and to the decrease in the number of female births which followed that visitation. It might be expected that, in those areas where the number of females is smallest, the female birth-rate would be comparatively low and the death-rate high; but the tables indicate that in such regions the very opposite is the case. Successive census officers have in vain sought for an explanation of this phenomenon, and the only conclusion reached is that the solution must lie in some cause outside of the vital statistics.

Civil condition

531. As in the case of religion, social prejudice must inevitably vitiate to a certain extent the census returns of the married and unmarried population. For example, the census instructions ordered the inclusion of divorcees under the head of "widowed"; but in Hindu society insult can go little further than to label as widowed one who is not in fact widowed by the death of husband or wife; and the reluctance of the enumerators to comply with this order must be taken into consideration in the scrutiny of the figures. Marriage in India, again, has a much wider significance than in western countries; it very frequently happens that a child is married before he or she attains the age of ten, or even of five, and becomes, socially speaking, a widower or widow long before domestic life is entered upon. Ladies of easy virtue, too, prefer to describe themselves as coming under the more respectable category. On the assumption that a man should not marry below the age of twenty, nor a girl below the age of fifteen, the table given in the margin shows the number per thousand of the total population of each sex who are of marriageable age and who are married or widowed. The only striking feature of this table is the excess of Hindus who have entered into matrimony or are widowed over those who are of marriageable age, and the explanation is, of course, the custom of child marriage, which, prevalent among all communities, is most common among Hindus of the better classes. A study of the number of married females, graded by age-periods, shows that there has been a decrease of one per cent among the married Hindu females of fifteen and below; this change, although it is a move on the right side, is not of sufficient magnitude to warrant the assumption that this particular branch of social reform has made very rapid strides during the last decade. Apparently Ganjām and Vizagapatam are the districts most addicted to child marriage.

Religion.	Married or widowed.		Of marriageable age.	
	Males.	Females.	Males.	Females.
All religions.	469	627	532	628
Hindu ...	473	634	535	630
Mussalman.	421	583	500	608
Christian ...	448	549	518	606
Animist ...	474	567	532	611

532. There were, in 1921, 1,061 married women to every thousand married men in the Presidency. The excess of wives over husbands is most marked among the Muhammadans of the Coromandel coast. But it would be wrong to draw too hasty a conclusion from these figures, in view of the very considerable number of persons from the (apparently) most polygamous parts who yearly betake themselves to foreign countries in search of work, leaving their families to await their return.

Literacy

533. The educational qualification demanded at the time of the census is the ability to write a letter and to read the reply thereto. Judging by this standard, of the total population of 42,794,155 there are now 3,667,737 educated persons in the Presidency. Madras ranks third among the bigger provinces of India, following Burma and Bengal. The figure is larger by 537,487 than that shown in the 1911 census, and it represents an increase of 13 per mille. Among men the increase has been from 138 to 152 per mille, while among women the improvement—from 13·4 to 21 per mille—has been much more marked. Among territorial units, the Agency, as might be expected, is by far the most backward, while the West Coast division is so far ahead in female literacy, although a little behind the East Coast South division in male literacy, that its total figure for both sexes heads the list. It is a striking fact that literacy in English has increased at a greater rate than literacy in the vernaculars, the actual figures being 170 and 20 per mille of males and females respectively, as against 121 and 13 in 1911. Of the principal castes, the Brāhmans are still the most literate; but it is amazing to find that male literacy among this caste has decreased, while female literacy shows a decided increase. In view of the undeniable spread of education, the only explanation of this falling-off is that a number of persons of ambitious but less literate castes have entered themselves as Brāhmans and thus distorted the figures. A similar decrease among male Vellālas is apparently due to the same cause. Although the actual number of literates among the "Depressed classes" is still very low, the rate of increase has been greatest of all; the male literates of the Chakkiliyan, Tottiyan and Odde castes have increased by from 80 to almost 300 per cent. The Indian Christian figures reveal the remarkable fact that, although the total male literacy has lost ground, the members of the Roman Catholic Church have improved in literacy.

Female literacy

534. The marked improvement in literacy among the total female population of the Presidency has already been noted. The advance has been greatest in the West Coast division, where the proportion is more than twice as great as that of any other area. Even in the Deccan, which is, after the Agency, the most backward in this respect, the 39 per cent increase of 1901—1911 has risen in the last decade to an increase of 79 per cent. This general improvement is distributed among all the castes, being most marked among the women of the Brāhman, Tīyan and Nādār castes.

Infirmities

535. In only one respect did the census orders with regard to infirmities differ from those given at the 1911 census—in the inclusion of those deaf-mutes whose affliction had been acquired subsequent to birth. The remark already made about the possibility of inaccuracy in the figures of religion and civil condition apply even more strongly in the case of such infirmities as insanity and leprosy; the untrained enumerator can hardly be expected to gauge to a nicety the very fine line which separates mental vacuity from insanity or to distinguish leprosy from those diseases which bear a superficial resemblance to it, nor is the average householder ready to admit the existence of an afflicted person in his family. The table in the margin shows the number of deaf-mutes and lepers, of the insane and the blind, in the censuses of 1911 and 1921. The outstanding feature of the table is the great fall in the number of deaf-mutes. In view of the addition mentioned in the first sentence of this paragraph, it was expected that the number would have shown a decided increase; the

Infirmity.	Number of afflicted in	
	1921.	1911.
Insane	8,689	8,407
Deaf-mutes	21,687	32,490
Blind	37,162	33,982
Lepers	15,753	16,858

Public Health officers have been unable to supply a satisfactory explanation for the fall, and it can only be surmised, with diffidence, that the influenza epidemic of 1918 found an easy prey in constitutions which were naturally deficient in disease-resisting power. The existence in certain places of institutions for the treatment of the infirmities enumerated above accounts in some cases for the high place in the lists occupied by the districts concerned. Thus Madras City and Malabar, which contain asylums for the insane, stand first and second in the list under this head; while the presence of a blind school at Palamcottah swells the Tinnevelly figure. Ganjām shows an increase of over 50 per cent in the number of the insane, and the Health authorities suggest as a possible explanation the growth of the drug habit in that locality. A gratifying feature of the figures for the blind is the decrease in the number of blind children. The admitted inaccuracy of the returns of leprosy make speculation on its distribution unprofitable.

Occupation

536. In 1911, for the first time, the normal occupation returns were supplemented by a special return from industrial establishments employing 20 persons or over; in 1921 this return was extended to all establishments employing 10 persons or over. The workers of the Presidency were classed under 56 orders and 191 groups. The inclusion of a new order of ærodrome employees and of groups covering private and public motor-drivers is a sign of the times. The abiding and hereditary nature of the agricultural professions in Madras makes the general trend of the occupational figures almost a foregone conclusion; nor do the returns show any departure from the 1911 results. Trade has, if anything, decreased and agriculture has correspondingly grown. Of every 100 persons in Madras, 71 are engaged in agriculture, 13 in industries (including mines and transport), 6 in trade and 10 in all other occupations. The proportion of actual workers to dependents in every hundred persons is 49 to 51.

Agriculture

537. Controversies over emigration, the economic condition of the small pattadar and so on, which are continually exercising the minds and pens of Madras politicians and economists, lend additional interest to the table given in the margin, which shows the distribution per thousand of the various classes of agricultural workers, exclusive of dependents. It can be left to the economist himself to draw such conclusions as he thinks fit from the figures of landlords and tenants. It will be noticed that there is a tendency for the cultivating landlord and the labourer to lose ground to the cultivating tenant and the non-cultivating landlord or tenant. Before these figures are accepted too sweepingly, it would be as well to remember that in many cases a villager is tenant and landlord at the same time, though in respect of different plots of land, and the description which he gives of his position to the enumerator may easily depend on his personal vanity. Any officer who has sat in a Tanjore court and has heard the glib reply "mirasidar and merchant" given by the average villager to the request for his occupation—and who has discovered in cross-examination that these high-sounding titles are claimed by virtue of the fact that the man cultivates a few cents of rented land and that his mother-in-law sells betel from a basket at the nearest cross-roads—will be rather chary of accepting without reserve the strict division of agricultural occupation. This argument does not, however, apply to the field labourers. The steady decrease during the last twenty years in their numbers is doubtless a reflection of the great boom in emigration. Whether the new emigration regulations will aid or retard this tendency is a question which will arise at the census of 1931.

Distribution of every 1,000 agricultural workers.

Description.	1921.	1911.	1901.
Non-cultivating land-owners ..	49	23	19
Cultivating land-owners	381	426	484
Non-cultivating tenants	28	4	1
Cultivating tenants	225	207	151
Farm servants	109	340	345
Field labourers	208		

Industries

538. The number of persons supported by industrial occupations has fallen from 5,591,058 in 1911 to 4,812,771 in 1921. Of this total "textiles" and "industries of dress, etc.," claim roughly one-quarter each, while under building and food industries are found 126 and 104, respectively, of every thousand of the industrial workers of the Presidency. The special return called for from industrial establishments shows that only 8 per cent of the industrial workers are employed in establishments of a strength of ten persons or more. This lack of organized industries seems to indicate that the day when Madras can claim to be a power in the industrial world has not yet arrived. The fall in the industrial population is on the whole not surprising. In Madras, the comparatively small industrial expansion which has taken place in recent years has been in the direction, not of large concerns such as the jute mills of Calcutta or the cotton mills of Bombay, but in the introduction of small rice-hulling, cotton-ginning and oil-pressing machines which tend to reduce the employment of hand workers. Further, the trade depression of recent years has undoubtedly driven a certain number of these engaged in cottage industries to agricultural work or to emigration.

Commerce

539. Trade supports about $2\frac{3}{4}$ millions of the population of the Presidency. Of these nearly half are employed in trade in food-stuffs and one-quarter in what the villager terms "sundry shops." The total shows a decrease of 0·6 per cent from the previous figure. This is an all-embracing group, ranging from the heads of the great European banks to the village sowcar and from the managers of the big Madras firms to the village grocer with a capital of a few rupees. The reductions in Government establishments have naturally affected the figures under "Public Force" and "Public Administration." Practically all the learned professions show a decrease, excepting those of medicine and law. But here again the wide range covered by the various groups compels caution. For example, group 172—nurses, midwives, etc. may or may not include in many cases the wives of the village barbers. The decrease under "Instruction" is most noticeable in those districts where an increase would be expected; but again the group ranges from the Director of Public Instruction to the pial school-master, who may have found himself driven from the field by the activities of local bodies.

Women workers

540. A striking feature of the 1921 census is the almost universal reduction in the number of women workers. The only sub-classes which show an increase are mining, transport and the learned professions; and the actual figures under these heads are very small. The total number of women workers is less by 813,823 than the previous figure, and the proportion of women to every thousand men has fallen from 648 to 585. There has been a fall of from 32 to 54 per cent in all the branches of the textile industries, but from the returns it is impossible to tell whether cottages or mills are the more affected. The number of Brāhman women workers has greatly increased. The increase occurs mainly among those who follow agricultural occupations.

Caste occupations

541. To turn to caste occupations, it is found that, out of the 72 main castes, all but 19 show agriculture as their favourite occupation. Even in the case of castes with special hereditary occupations, a considerable proportion are returned as agriculturists. Among the "Depressed classes" field labourers have greatly decreased, and the number of cultivating land-owners and tenants has correspondingly increased. Cultivation too claims the vast majority of the hill and jungle tribes.

542. It is regrettable that the number of persons whose occupations have not been sufficiently described for purposes of enumeration shows a very decided increase; the actual number of such persons was over 2,100,000 at the census of 1921.

APPENDIX

APPEN

Natural divisions, districts and States.	Area in square miles.	Population.			Density of population per square mile.	Population living in		Percentage variation in population during 1911–1921.	Number in 10,000 who are			
		Total.	Males.	Females.		Towns.	Villages.		Hindus.	Muhammadans.	Christians.	Others.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Agency	19,880	1,496,358	748,893	747,465	75	9,669	1,486,689	– 4·1	6,862	30	118	2,990
East Coast (North).												
2. Ganjām	4,798	1,835,562	826,644	1,008,918	383	108,456	1,727,106	– 1·9	9,690	28	11	271
3. Vizagapatam ...	4,568	2,231,874	1,080,146	1,151,728	489	228,813	2,003,061	+ 2·0	9,872	88	25	15
4. Gōdāvari ...	2,545	1,470,863	718,924	751,939	578	208,157	1,262,706	+ 1·7	9,742	158	97	3
5. Kistna	5,907	2,133,314	1,063,186	1,070,128	361	262,970	1,870,344	+ 6·8	9,208	350	427	15
6. Guntūr	5,735	1,809,574	913,088	896,486	316	245,362	1,564,212	+ 6·6	8,378	722	848	52
7. Nellore	7,973	1,385,553	697,380	688,173	174	96,805	1,288,748	+ 4·3	8,585	644	379	392
Deccan.												
8. Cuddapah ...	5,918	887,929	452,181	435,748	150	84,748	803,181	– 0·7	8,491	1,199	290	20
9. Kurnool	7,580	914,890	463,255	451,635	121	46,032	868,858	– 2·2	8,062	1,339	586	13
10. Bellary	5,713	862,370	439,688	422,682	151	145,423	716,947	– 11·0	8,931	1,013	41	15
11. Anantapur ...	6,722	955,917	492,346	463,571	142	122,758	833,159	– 0·8	9,042	889	52	17
East Coast (Central).												
12. Madras	29	526,911	276,107	250,804	18,169	526,911	...	+ 1·6	8,117	1,009	838	36
13. Chingleput ...	3,071	1,493,058	752,542	740,516	486	231,291	1,261,767	+ 6·2	9,543	224	218	15
14. Chittoor	5,611	1,269,157	647,625	621,532	226	69,297	1,199,860	+ 2·5	9,396	511	54	39
15. North Arcot ...	4,954	2,055,594	1,021,087	1,034,507	415	288,397	1,767,197	+ 4·8	9,207	576	175	42
16. Salem	6,912	2,112,034	1,051,025	1,061,009	306	139,831	1,972,203	+ 3·4	9,703	223	73	1
17. Coimbatore ...	7,225	2,219,848	1,106,171	1,113,677	307	205,124	2,014,724	+ 4·9	9,665	207	128	...
18. South Arcot ...	4,207	2,320,085	1,152,414	1,167,671	551	195,597	2,124,488	– 1·8	9,412	289	279	20
East Coast (South).												
19. Tanjore	3,727	2,326,265	1,116,702	1,209,563	624	379,903	1,946,362	– 1·5	9,051	562	385	2
20. Trichinopoly ...	4,319	1,902,838	931,890	970,948	441	230,029	1,672,809	+ 4·0	9,182	336	482	...
21. Madura	4,907	2,007,082	987,468	1,019,614	409	305,396	1,701,686	+ 4·3	9,282	393	325	...
22. Rāmnād	4,838	1,721,837	818,619	903,218	356	336,754	1,385,083	+ 3·3	8,831	675	494	...
23. Tinnevelly ...	4,325	1,901,396	926,515	974,881	440	440,670	1,460,726	+ 6·2	8,414	574	1,012	...
West Coast.												
24. Nilgiris	982	126,519	67,018	59,501	129	38,499	88,020[c]	+ 6·7	7,833	535	1,595	37
25. Malabar	5,792	3,098,871	1,510,732	1,588,139	535	235,079	2,863,792	+ 2·8	6,582	3,241	176	1
26. Anjengo	1	5,918	2,823	3,095	5,918	...	5,918	+ 6·2	3,011	370	6,619	...
27. South Kanara ...	4,021	1,247,368	606,280	641,088	310	96,734	1,150,634	+ 4·4	7,864	1,217	853	66
Native States.												
28. Pudukkōttai ...	1,179	426,813	205,033	221,780	362	26,101	400,712	+ 3·6	9,215	352	433	...
29. Banganapalle ...	255	36,692	18,557	18,135	144	...	36,692	– 6·7	7,729	2,082	189	...
30. Sāndūr	158	11,665	5,819	5,846	74	...	11,665	– 13·8	8,138	1,841	21	...
Total	**143,852**	**42,794,155**	**21,100,158**	**21,693,997**	**297**	**5,304,806**	**37,489,349**	**+ 2·2**	**8,866**	**670**	**323**	**141**

DIX.

Number of the Christian population.	Civil condition of						Number in 10,000 who are literate.			Number in 10,000 who are literate in English.		Per 1,000 of district population, proportion of			
	Males			Females.											
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Total.	Males.	Females.	Males.	Females.	Agricultural population.	Industrial population.	Commercial population	Professional population.
(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
17,603	383,739	333,056	32,098	320,679	326,002	100,784	144	256	32	24	1	804	37	30	9
1,969	390,695	408,079	27,870	295,359	516,719	196,840	638	1,330	70	123	2	781	54	64	22
5,656	482,685	557,047	40,414	305,398	605,252	241,078	474	841	129	140	12	691	109	53	13
14,237	369,479	326,612	22,833	240,611	348,747	162,581	755	1,272	260	201	14	767	112	55	21
91,087	535,402	479,346	48,438	371,883	496,740	201,505	720	1,177	266	151	10	673	145	68	25
153,510	472,789	400,903	39,396	322,913	408,209	165,364	693	1,183	194	111	9	777	119	49	17
52,496	388,875	276,727	31,778	245,993	287,899	154,281	554	947	155	98	12	670	148	84	25
25,739	250,952	171,934	29,295	150,477	173,696	111,575	597	1,079	98	75	5	740	137	62	21
53,656	247,450	185,125	30,680	160,963	187,487	103,185	610	1,103	104	86	4	732	120	52	23
3,532	234,757	171,666	33,265	156,830	174,321	91,531	672	1,209	112	110	12	786	89	57	28
4,923	270,891	186,634	34,821	170,993	190,361	102,217	595	1,059	103	99	8	736	119	43	20
44,136	135,620	130,508	9,979	87,301	120,032	43,471	3,201	4,532	1,737	2,131	498	39	370	196	124
32,531	414,272	309,982	28,288	294,781	320,795	124,940	973	1,714	221	219	27	713	125	57	30
6,916	361,659	250,822	35,144	230,553	261,274	129,705	649	1,160	118	107	8	760	125	49	15
36,019	555,910	425,637	39,540	410,221	447,009	177,277	776	1,428	132	109	10	736	101	65	19
15,375	564,563	440,290	46,172	426,342	454,282	180,385	484	891	81	71	6	701	107	57	20
28,308	593,555	464,098	48,518	452,354	481,862	179,461	762	1,361	167	130	16	677	123	62	23
64,654	616,808	489,869	45,737	440,433	515,787	211,451	935	1,748	132	98	7	821	83	34	21
89,558	590,933	473,016	52,753	443,483	516,759	249,321	1,313	2,476	239	293	14	698	122	64	45
91,727	495,854	398,220	37,816	365,142	419,669	186,137	936	1,710	193	194	16	710	140	57	25
65,301	530,089	414,916	42,463	412,210	433,343	174,061	940	1,766	141	153	16	747	133	59	21
85,102	437,307	343,629	37,683	351,922	391,026	160,270	1,083	2,120	143	111	6	714	106	81	19
192,350	504,554	382,796	39,165	396,529	418,361	159,991	1,331	2,357	357	194	25	587	208	77	26
20,178	36,004	28,674	2,340	25,542	26,534	7,425	1,618	2,329	817	835	432	597	114	54	60
54,650	874,239	575,740	60,753	669,187	610,621	308,331	1,268	2,085	491	175	30	615	193	102	39
3,917	1,809	909	105	1,656	1,040	399	2,949	3,489	2,456	1,144	1,079	180	234	181	54
106,354	347,333	238,428	20,519	249,051	270,791	121,246	931	1,615	284	183	43	723	130	85	26
18,470	111,515	84,536	8,982	87,317	93,108	41,355	1,006	1,957	126	152	5	761	78	74	36
694	9,980	7,154	1,423	6,436	7,286	4,413	585	1,056	103	76	1	549	122	88	8
24	3,241	2,090	488	2,258	2,206	1,382	646	1,174	120	117	15	776	86	65	34
1,380,672	**11,212,953**	**8,958,449**	**928,753**	**8,094,817**	**9,507,218**	**4,031,962**	**857**	**1,522**	**211**	**170**	**20**	**708**	**126**	**64**	**25**

BIRTHS AND DEATHS (1921)

[*The fifty-eighth annual report of the Director of Public Health, Madras, for 1921; Report on the working of the Births, Deaths and Marriages Registration Act of 1886 during the year 1921-22; Statistics of British India, Vol. III, Public Health—Vital Statistics*]

Population

543. Excluding the hill tribes of the Agency division and the inhabitants of the Laccadive islands and of the Banganapalle and Pudukkōttai States, the estimated population of the Presidency for the year 1921 was 45,312,983. The actual population as ascertained at the census of March 1921 was 42,759,827. Even allowing for the liberal margin of error which must be admitted in the case of estimated statistics, it is obvious that the full number of casualties from some destructive scourge—presumably the influenza epidemic of 1918—was not recorded.

Registration of vital statistics

544. The compulsory registration of births and deaths was in force in 333 unions and 2,393 villages of the Presidency. During the year the Director of Public Health devoted special attention to the returns of vital statistics. His investigations show that these returns reveal the most astonishing variations in the rates of fecundity and mortality, variations which cannot be explained by the routine heading of "natural causes," and that the greatest caution must be exercised in accepting the figures or in drawing therefrom conclusions as to the state of the general public health.

Births

545. The total number of births registered in the year was 1,108,474, a decrease of 28,764, as compared with the figure for the preceding year; this total gives a birth-rate of 27·0 per mille as against 28·4 per mille in 1920 and the decennial average of 30·6 per mille. This decrease is due in part to the diminution in the number of births registered, and in part to the fact that the rate was estimated on the basis of the increased population recorded at the 1921 census. The two districts showing the highest rates are South Kanara (37·4) and Madras (36·4). Of the 26 districts, no less than 18 districts show a decreased figure, while seven districts show an increased rate, the highest being South Kanara and Ganjām with increases of 4·3 and 3·1 per cent, respectively. All the districts except Bellary, Cuddapah, Ganjām and South Kanara show a figure below the decennial average. A comparison of the Madras figure with those of the other provinces shows that the rate in this Presidency is the lowest of all, and, there being no grounds for assuming that fecundity in Madras is especially low, the inevitable conclusion is that defective registration has militated against an accurate representation of the true state of affairs. For every 100 female births there were 104·7 male births as against 105·2 in the previous year. Of the various religious communities, Muhammadans again showed the highest birth-rate—28·7 per mille as against 30·8 per mille in 1920; the Hindu and Indian Christian figures were respectively 27·2 and 24·1 per mille as against 28·2 and 28·3 in last year. The ratio of still-births to live-births was 9 to 1,000. The fact that, in rural areas where compulsory registration was in force, the birth-rate as recorded (26·4) was lower than that in rural areas where the Act was not in force provides additional proof of faulty registration. The average registered birth-rate for the 216 rural towns of the Presidency was 22·6 per mille, an increase of 0·1 per mille on the last figure. In the 81 municipalities, the average rate fell from 35·2 to 31·2. Only one inference can be drawn from the wide difference between the rural town and municipal figures. The total number of

Deaths

deaths registered in the year fell from 873,981 to 826,897; the rate per mille was thus 20·2 as compared with the previous 21·8 per mille and the quinquennial 28 per mille. Here again Madras shows the lowest figure of all the provinces. The rate varied from 13·5 in Rāmnād to 38·6 in Madras. A classification of the figures by age and sex reveals one appalling feature; among women, the mortality at the child-bearing age—15 to 39—is very much higher than that among men of the same age. As there

is no known disease to which women of that age are peculiarly liable, it can only be assumed that want of proper attendance during child-birth is responsible for this continually recurring mortality. The figures for the attendance of qualified midwifes bear out this inference ; in 23 of the 26 districts the proportion of such attendances to the total number of births registered was below 10 per cent. The rate of infantile mortality was 160·9 per 1,000 births, a decrease from the 161·3 of 1920 and the quinquennial average of 192·2. Of the districts, Madras showed the highest figure (283·8), while at the foot of the table Cuddapah showed only 104·2 per mille. It is apparent from the returns that but little value can be attached to the age of mortality among infants as recorded ; for example, in Anantapur 67·9 per cent of such deaths are said to have occurred among infants in their first week of life, while the corresponding percentage for Salem is only 3·0 ; nor is Salem the better endowed with maternity institutions. In 1920, the Muhammadan community showed a higher death-rate than the Hindus or Indian Christians ; but in the year under review the Hindu figure rose above that of the Muhammadans. As in the case of births, the death-rate in the areas under compulsory registration was lower than that in the areas not so controlled. The average death-rate for rural towns fell from 18·1 to 17·6 per mille, and in municipalities the rate fell from 33·5 to 30 per mille ; the contrast is as marked as in the case of births and gives ground for the same suspicion.

546. The fact that, of the recorded deaths, over 80 per cent are returned as being due to fever and "other causes" practically precludes any attempt to arrive at conclusions regarding the chief features of past epidemics. Under the all-embracing term "fever" the average villager is prone to include every illness known to man which is attended by a high temperature, and his knowledge of the distinction between cholera and dysentery is equally nebulous. There is room too for the suspicion that the village authorities, apart from their excusable ignorance of things medical, are in some cases slow to give notice of suspected epidemics, for reasons not unconnected with the extra work which invariably follows the arrival of the health officer. To deal first with these types of disease —if they can be called types—fevers were responsible for 39 per cent of the recorded deaths, or 7·7 per mille of the total death-rate. Apart from the Agency division, where malaria is rampant, the very high death-rate from this cause in the Northern Circars and parts of the Ceded districts cannot be explained except by faulty registration. Dysentery and diarrhœa claimed a death-rate of 1·3 per mille as against 1·4 in 1920. Madras as usual returned the highest death-rate from these causes. The prevailing confusion between these diseases and cholera seems to be proved by the fact that, in the months when cholera is most rife, the dysentery and diarrhœa returns reach their highest level. The death-rate per mille from cholera fell from 0·8 to 0·7. No district was entirely free from the epidemic, and the heavy mortality in the Tanjore, Gōdāvari and Kistna districts coincided with the occurrence of important festivals within their limits. An investigation into the periodicity of cholera outbreaks shows that the disease reaches its height in the monsoon seasons, when the flooded rivers aid the spread of infection. Small-pox claimed a death-rate of 0·2 per mille, as against 0·3 per mille in the previous year. It was present in every district in the Presidency throughout the year, the heaviest mortality being in Cuddapah and Kurnool. Although the death-rate from this cause declined considerably in the year the figure is still heavy enough to warrant the assumption that the benefits of vaccination are not yet realized by the mass of the population. The mortality from plague fell by about 19 per cent, the death-rate per mille being 0·3 as against 0·4. Coimbatore and Salem showed the heaviest figures. Here again, there is room for much greater promptitude in the notification of outbreaks. The miscellaneous heading "other causes" accounts for about 43 per cent of the recorded deaths. In view of the remarks made in the earlier portions of this review, further comment on

Chief diseases

Fever

Dysentery and diarrhœa

Cholera

Small-pox

Plague

Other cause

this capacious heading is unnecessary. In conclusion reference must be made to the reappearance in this Presidency of "relapsing fever" after a century of immunity. Cases of this disease were first reported in Salem, but the epidemic assumed alarming proportions in the Tanjore and Trichinopoly districts, where five taluks were infected, and it is highly probable that the disease will again break out, as personal uncleanliness is its best friend, and at present hygienic habits are not accounted a virtue among the mass of the lower castes.

Europeans and Anglo-Indians

547. That the facilities offered to the Christian, Jewish, Armenian and Parsi communities for the registration of births and deaths under the Act of 1886 are not widely used is clear from the fact that, whereas 1,230 baptisms and 719 burials were returned under the ecclesiastical rules, the number of births and deaths registered was only 77 and 21. Presumably the majority of these persons, who live mainly in places where compulsory registration is in force, are content with the one act of registration thus provided. The number of Registrars appointed under the Indian Christian Marriage Act remained the same as in last year. The number of marriages contracted by European and Indian Christians fell from 391 and 8,878 to 339 and 8,418, respectively.

EMIGRATION AND IMMIGRATION (1921)

[*G.O. No. 1185, Law (General), dated the 6th May 1922; Statistics of British India, Vol. IV, Administrative, etc.—Emigration*]

Regulated

548. There was no indentured emigration during the year to the West Indies and Fiji, as the prohibition imposed by Government in 1917 remained in force. One thousand two hundred and ninety-seven emigrants returned from Natal in five ships and one hundred and sixty-seven from Mauritius in one ship. There was no emigration to the French Colonies.

Non-regulated

549. The number of passengers to the Straits Settlements decreased from 96,128 in 1920 to 45,627 in 1921. The decrease was due to a continued stagnation in the rubber industry. The number of passengers to Burma and Ceylon showed a decrease of 25,907 and 18,181, respectively; but it is impossible to differentiate emigrants who go to settle permanently, from casual passengers. The decrease in the number of passengers to Burma was attributed to the favourable character of the agricultural season in the Northern Circars, whence labourers usually go to Burma every year, and the consequent improvement in the economic conditions there, and also to the high prices of food grains in Burma. The decrease in departures to Ceylon was ascribed to the stagnation in the tea and rubber industries and to the favourable character of the agricultural season in Southern India. The number of persons recorded as having taken passages to ports outside the Presidency but within British India was 13,290 against 14,729 in the previous year. The great majority of these consisted as usual of passengers from South Kanara to Bombay coast ports. The number of persons who returned from Burma increased by 3,127 to 91,947. The increase was due to more regular steamer service. The number of persons who returned from Ceylon decreased by 13,308 to 116,305. This was the natural consequence of the decrease in departures to that Colony. The number of persons who returned from the Straits Settlements increased by 8,061 to 55,466. This was attributed to the curtailment of labour on rubber estates.

MEDICAL RELIEF (1921)

[*Annual Returns of the Civil Hospitals and Dispensaries in the Madras Presidency for the year 1921; Statistics of British India, Vol. III, Public Health—Hospitals*]

Medical institutions

550. By the closing of 28 institutions and the opening of 31 new institutions during the year, the final total of those maintained was 742, of which 532 were vested in local bodies. The only decrease of note was under State-special institutions, i.e., those reserved for special sections of the public, such as police, etc., and these reductions were mainly due to amalgamations. The number of railway dispensaries remained stationary. One headquarter hospital was taken over by Government during the year. The total of private aided and non-aided institutions rose from 83 to 85, of which 28 were State-aided.

Relief

551. The total number of in-patients and out-patients treated in all classes of institutions during the year was 152,701 and 8,563,775, respectively, as against 148,740 and 8,313,763 in last year. In State-public, local fund and private-aided institutions 4,323 beds were available for men and 3,135 for women, the respective increase and decrease being 213 and 115. The daily average attendance rose to 5,822 from 5,613 in the case of in-patients and to 50,028 from 41,198 in the case of out-patients. Classified by religions, the only class which showed a decrease was that of Europeans and Anglo-Indians. Men and women, male and female children, all showed an increase. The death-rate among in-patients fell from 4·98 to 4·94. The number of patients represented by friends decreased slightly from last year's figure. To judge by the figures of attendance, the most prevalent diseases were, in the case of out-patients, those of the digestive system, of the skin, of the ear, of the eye and of the respiratory system, injuries and malaria. Among in-patients, as might be expected, injuries came first in number, followed by diseases of the digestive system, malaria and diseases of the eye. Operations increased in number by nearly 12,000, of which 25,759 were returned as really major. To this increase operations on the skin contributed the greatest share.

Finance

552. The receipts of the year rose from Rs. 52·47 lakhs to Rs. 56·76 lakhs, both Government and Local Fund and Municipal contributions showing a decided increase. But public subscriptions fell slightly. The expenditure also rose from Rs. 52·28 lakhs to Rs. 56·63 lakhs, due chiefly to the enhancement of salaries. The expenditure on medicines and buildings fell considerably.

Madras Medical College (1921-22)

553. The eighty-seventh session of the college lasted from July 1921 to March 1922. The number of students on the rolls rose, by 55, to 634. Recent developments in the extension of the sanitary and health branches of the medical administration account for the bulk of the increase. The percentage of passes at the University examinations rose from 51·1 to 54·0. Female students increased in number from 53 to 63. The percentage of examination failures in all subjects fell considerably. The Chemist and Druggist class continued to be held, and its reorganization is imminent. Of the fourteen graduates who appeared for the B.S.Sc. degree examination, four men qualified. The Post-collegiate course for sub-assistant surgeons was temporarily held in abeyance and the Dental Post-collegiate class could not be held owing to want of funds. Further useful additions were made to the library, and its value to the students was again noticeable. In sports the students continued to take an active share, and a syllabus of physical and stretcher drill and of first-aid training will come into force in the current year.

Medical Schools (1921-22)

554. The rolls of the five medical schools—Rāyapuram, Tanjore, Vizagapatam, Calicut and Madura—showed a total number of 1,262 students as against 1,183 during last year. Only the Tanjore school showed a decrease. Brahmans (641) were again in the majority, followed by non-Brāhmans (456) and Christians (143). Private students increased in number from

665 to 776, an encouraging sign. Although the number of candidates for the L.M.P. diploma rose from 219 to 246, the number of successes fell from 115 to 104. To turn to individual schools, the Calicut school now takes its pupils only to the completion of the second year class, when they are transferred for further training to other schools. At Tanjore, improvements to the buildings and the construction of an anatomical block are in hand, while the construction of a hostel has been held up for want of funds. Good progress has been made at Coimbatore with the building of the new schools. At Rāyapuram, additions are being made to the hostel accommodation ; the lack of any hostel accommodation at Vizagapatam and Madura is a matter for regret. Government have ordered the amalgamation of the school libraries with the district medical libraries. The receipts of the schools fell from Rs. 0·47 lakh to Rs. 0·35 lakh, while the expenses rose from Rs. 3·22 lakhs to Rs. 4·18 lakhs.

THE PASTEUR INSTITUTE, COONOOR

(1ST MARCH 1921 TO 28TH FEBRUARY 1922)

[*Annual Report of the Director of the Pasteur Institute, Coonoor, 1922*]

555. The number of patients who underwent a full course of treatment during the year fell, by 152, to 3,471. The decrease was due chiefly to the prevalence of general unrest which made people unwilling to leave their villages. The Māppilla rebellion also caused a large drop in the number of patients not only from Malabar, but from the whole of the West Coast. This is proved by the sudden return to normal figures in the months succeeding those of the rebellion. Five patients died during the course of treatment from hydrophobia ; nine died within less than fifteen days from the date of completion of treatment and twenty-seven after more than fifteen days after the completion of treatment. The last, classed as failures, give a percentage of 0·77 per cent as against 0·63 per cent in the previous year. There were in addition 98 persons who, for various reasons, did not complete the full course of treatment. One hundred and forty-three patients remained under treatment at the close of the year. Two hundred and eleven persons were given advice but were not treated. The virus was in its 796th passage on the 28th February 1922. The proposal of the Director of the Institute to distribute anti-rabic vaccine to headquarter hospitals of the Presidency for the treatment locally of persons bitten by rabid animals was sanctioned. The net receipts, excluding refunds of advances, proceeds of the sale of investments, miscellaneous receipts and the sum collected by special appeal to the public, amounted to Rs. 36,630 and the net payments, excluding advances to patients and capital expenditure on new buildings, amounted to Rs. 38,803. The actual ordinary receipts were thus less by Rs. 2,173 than the actual ordinary expenditure. The deficit and the capital expenditure on new buildings, amounting to Rs. 21,525, were met from the proceeds of the sale of investments.

LUNATIC ASYLUMS (1921)

[*G.O. No. 789, Local Self-Government (Public Health) Department, dated the 5th June 1922; Statistics of British India, Vol. III, Public Health —Lunatic Asylums*]

556. The three asylums at Madras, Vizagapatam and Calicut had accommodation for 1,058 patients as against 1,038 in the previous year, and the daily average population was 917 as compared with 895. Females formed roughly 24 per cent of the population. Three persons were admitted as voluntary patients under the Indian Lunacy Act (IV of 1912). Of a total of 1,237 patients, 133 were discharged as cured and 82 died. The total number of criminal lunatics under observation fell again from 195 to 189. The daily average sick-list swelled from 71 to 104. The returns show that, of the various professions, small ryots, general labourers, sepoys, teachers and students provided the greatest number of inmates and that, as usual, the mass of the patients were aged between 20 and 40. The receipts from paying patients rose from Rs. 28,000 to Rs. 32,000. Regular inspections were carried out by both official and non-official visitors. No pains were spared to make the life of the inmates as wholesome as possible, and their personal cheerfulness was the subject of special care.

SANITATION (1921)

[*The thirty-second annual report of the Sanitary Engineer to Government and the fifty-eighth annual report of the Director of Public Health, Madras, for the year 1921*]

Municipalities

557. Of the eighty-one municipalities in the Presidency, there were, at the close of the year 1921, only twenty-nine which had the benefit of a protected water-supply; during the year under review no additions were made to this number. In twenty-two municipalities house-service connexions were in use, an increase of one over last year's figure. Generally speaking, the municipal authorities have not yet realized the efficient check on wastage of the water-supply which is ensured by the use of metered house-connexions. During the year plans and estimates were submitted by the Sanitary Engineer for a water-supply scheme for Calicut, for drainage schemes for Adōni, Salem, Rajahmundry, Tiruppattūr, Bezwada and Berhampūr, for the extension of the Kodaikānal waterworks and for the revision of the conservancy arrangements in the public offices at Chepauk, Madras. Although it is true that the present financial situation has almost entirely held up all sanitary schemes of an extensive nature, it is equally true that the municipal authorities have shown little enthusiasm in applying those elementary precautions for the prevention of disease which are comparatively inexpensive and which can easily be defrayed from their present resources. A committee, with the Director of Public Health as chairman, was appointed by Government to report on the question of the disposal of sewage and of the waste products of conservancy, and its recommendations are under the consideration of Government. The number of sanitary inspectors and menials in the employment of municipalities increased slightly, but there was a fall in the number of the menial supervising staff. The employment of a separate staff of sanitary overseers does not seem to be justified by results. There are now several trained Health Officers available for employment in municipalities, and it is hoped that advantage will be taken of this opportunity to ensure adequate supervision of the sanitary staffs. The number of public latrines increased in number, but not in quality; a preference is still shown for ramshackle and insanitary enclosures. That a very great improvement is yet to be effected even in the number of public latrines is evident from the fact that there is not at present one latrine for every thousand of the

population. Private latrines increased in number by about 7 per cent, but the proportion of those which were conserved by municipal agencies fell from 88·9 per cent to 85·2 per cent. Of the houses of a class that should possess private latrines, only 39·4 per cent were so provided ; and this in spite of the compulsory provisions of the Act. The allotment from municipal funds for sanitary purposes amounted to Rs. 37·02 lakhs and the expenditure to Rs. 25·82 lakhs, as against Rs. 32·63 lakhs and Rs. 22·08 lakhs in the previous year, the allotment being more or less evenly divided between conservancy and sanitation.

District boards

558. As the local boards only came under the operation of the new Act (XIV of 1920) in April 1921, it is too early to gauge the working of its provisions in respect of sanitation. With the exception of Rāmēswaram, where the new water-supply scheme came into use during the year, no progress was made in the protection of rural water-supplies. The careless and promiscuous use of surface water by the rural population entails a heavy yearly expenditure on the suppression of cholera and other water-borne diseases, and, in the present state of financial resources, the best that can be done is the construction of protected wells in each and every area. District Health Committees have been formed in five districts as an experimental measure, and they have the assistance in their deliberations of experienced District Health Officers. For the first nine months of the financial year 1921–22, the expenditure on sanitation amounted to Rs. 8·18 lakhs or 55·32 per cent of the allotment, as against Rs. 8·12 or 45·74 per cent of the allotment in the first nine months of the previous year. The 1921–22 figure represents 19·96 per cent of the total income of the boards, compared with 26·41 per cent in 1920–21.

VACCINATION (1921–22)

[*Annual Report on Vaccination in the Madras Presidency for the year 1921–22 ; Report on the working of the King Institute of Preventive Medicine, Guindy, for the year 1921–22 ; Statistics of British India, Vol. III, Public Health—Vaccination*]

General

559. The new scheme of vaccination was in operation during the year throughout the Presidency and some improvement was noticeable in the work turned out. Although two additional Deputy Inspectors of Vaccination were sanctioned for the Kistna district the additional ranges were not formed owing to the refusal by the Gudivada Taluk Board to appoint an additional vaccinator. The personnel of vaccinators in the Presidency leaves much to be desired and it is impossible to improve it unless local bodies make up their minds to pay them adequately. There seems to be no dearth of candidates, but the inadequacy of the pay makes the posts unacceptable to any but the incompetent. The total quantity of vaccine lymph issued during the year by the King Institute, Guindy, was 1,830,000 cases, a decrease of 224,075 cases as compared with that of last year, and there was a corresponding decrease in the total number of vaccinations from 1,568,270 to 1,474,719. The decrease was due mainly to the cessation of routine vaccination during the hot months sanctioned by Government in May 1921 and brought into effect for the first time during the present year. It is certain that the number of cases requiring vaccination was not less than that of the previous years and there is thus an increase in the un-vaccinated population. The remedy for this seems to lie in intensifying the vaccination campaign during the winter months rather than in a return to hot weather vaccination, as the cessation of vaccination in the hot weather has had a beneficial effect on the success rates. The non-co-operation movement, the disturbed condition of Malabar, the decreased prevalence of smallpox during the year and the delay in filling up vacancies among vaccinators were among the other causes that brought about the decrease. There was, however, an increase of 17·1 per cent in the total success rate

under primary vaccination. The cessation of vaccination during the hot weather months and the improved quality of the vaccine lymph supplied by the King Institute, Guindy, probably combined to make the improvement possible. Compared with the previous year there was an increase of 62,985 in the number of children under one year of age successfully vaccinated. The number of operations performed during the year in municipalities increased by 16,788 to 170,382. While there were large increases in certain municipalities like Madras, Bellary, Palacole and Nellore, there were large falls in Madura and Negapatam which is attributed to the want of genuine interest on the part of the authorities concerned and to the lack of supervision over vaccinators. As compared with last year the success rates obtained with both lanoline and glycerine lymphs were generally much higher. Glycerine lymph produced the better result in all the ranges. In local fund areas the superiority was as much as 12·9 per cent while in municipalities it was 7·1 per cent. Experiments are being carried out by the Director of the King Institute, Guindy, with a view to effect improvements in the quality of the vaccine lymph and the Saidapet range has been placed under his control for the purpose. There were 9,792 deaths from small-pox against 13,697 in the previous year. The total cost of the department decreased from Rs. 5·43 lakhs to Rs. 5·17 lakhs and the average cost of successful vaccinations from As. 10-8 to As. 8-8.

CHAPTER VII

INSTRUCTION

GENERAL SYSTEM OF PUBLIC INSTRUCTION

General

560. Public instruction is controlled by the Educational Department of Government. The control which Government exercise over the University of Madras is very slight and consists chiefly in an annual audit of accounts and in the statutory rule whereby all changes in the by-laws of the University have to receive the sanction of the Governor in Council. Colleges may be affiliated to the University on compliance with certain regulations. Certain institutions are maintained and managed by Government directly; they include at present ten colleges for general education and nine colleges for special branches of education, of which four are not under the Educational Department, 36 secondary schools, 789 primary schools and 89 training schools for special education. Other institutions are aided by Government by money grants for various purposes on prescribed conditions. Government, local boards and municipalities make grants-in-aid to 362 and 22,839 schools, respectively, of the secondary and primary grade and to 201 other institutions under private management. Local boards and municipalities maintain in addition two colleges, 194 secondary schools and 9,708 elementary schools. Over these schools Government exercise considerable control by their scrutiny and sanction of the budgets of local bodies; the budget grants are made on the recommendation of the officers of the Educational Department. District boards and municipalities are subsidised by Government for the maintenance of secondary schools under their control, the net cost of those opened in 1918 and subsequent years being fully or partly met from Provincial funds. The Madras Elementary Education Act of 1920 requires taluk boards and municipalities to constitute "Elementary Education Funds" under their control and the budget estimates relating to such funds are subject to the approval of the Local Government. The Government further grant secondary school-leaving certificates to pupils of recognized schools, i.e., schools which are managed in accordance with certain conditions laid down by Government. The Government notify from time to time the text-books which may be used in aided and recognized institutions. Scholarships are awarded annually by Government in recognized schools and colleges, some of them being reserved for females or members of the backward classes. In order to maintain a supply of competent teachers, Government maintain 89 training schools and 3 training colleges for teachers, grant stipends to a large number of their students and, after examination, issue teaching certificates; the staff of a recognized or aided school must consist of teachers holding such certificates or having some equivalent professional qualifications. There are 20 training schools for masters and 15 for mistresses under private (mission) management. Sex does not affect a candidate's eligibility to appear for the public and University examinations, and women can obtain degrees on the same terms as men; girls may, as a rule, attend the elementary schools for boys and there are secondary and elementary schools for girls only; 4 colleges for women are affiliated to the University. The education of backward and indigent classes is specially encouraged by the maintenance of schools and the grant of assistance in money to schools for such classes under private management at increased rates and on conditions easier than those prescribed for ordinary schools. Technical education is promoted by the maintenance of technical colleges affiliated to the University, by a system

of technical examinations, by the inclusion in the secondary school-leaving certificate scheme of technical subjects and by the award of scholarships to be held in technical schools and colleges. In elementary schools the pupils are usually taught in their own vernacular; but English is the medium of instruction and examination in the high school departments of all high schools except a few vernacular high schools for girls and in all colleges affiliated to the University. Physical education is practically compulsory in all recognized schools. Four classes for the training of physical training instructors are maintained, two by Government and two by aided high schools. The examinations for the higher grade teachers' certificates include questions on moral training. Religious instruction is not included in any of the prescribed courses of instruction; but while Government does not provide religious instruction in its own institutions with the exception of the Madrasa-i-Azam, teachers in recognized schools may impart religious instruction at any time provided that secular instruction is given for the prescribed number of hours.

The Educational Department

561. The head of the Educational Department under Government is the Director of Public Instruction. The department is broadly divided into (*a*) the superior service and (*b*) the subordinate service. The former consists of the Indian Educational Service and the Madras Educational Service. The Indian Educational Service consists of 66 posts, 13 of which are included in the Women's Branch. These posts are filled by persons appointed in England or in India with the approval of the Secretary of State. The Madras Educational Service consists of 62 posts, 19 of which are included in the Women's Branch. These posts are filled by recruitment in India. There are also certain special posts, not included in the Indian Educational Service but recruited from England, and others not included in the Madras Educational Service to which appointments are made by the Local Government. The pay of officers in the Indian Educational Service ranges from Rs. 400 to Rs. 1,750 per mensem, with allowances in special cases, while that of persons in the Women's Branch ranges from Rs. 400 to Rs. 1,050. In the Madras Educational Service the minimum and maximum pay are Rs. 250 and Rs. 800, and in the Women's Branch Rs. 200 and Rs. 500.

The supervising agency

562. For the purpose of the administration of the education of boys the Presidency is divided into sixteen circles and for that of girls into five circles, each of which is under an inspector or inspectress of schools. There is an Inspector of European Schools belonging to the Indian Educational Service with a provincial assistant. The inspectors and inspectresses are members of the Indian Educational Service. Where inspectors' circles include more than one district, each district has an assistant inspector. Under these are 181 sub-assistant inspectors; there are also 14 sub-assistant inspectors of Muhammadan and Māppilla schools and one sub-assistant inspector for Bangalore. There are a superintendent and two supervisors of Sanskrit schools. For the supervision of girls' schools there are three provincial assistant inspectresses and 18 sub-assistants of the subordinate service. Except in the Agency and in connexion with Sanskrit schools, the cadre of supervisors of boys' elementary schools was recently abolished. An adviser with an assistant and three touring demonstrators supervise physical training.

The Text-book Committee

563. The Text-book Committee was appointed to take into consideration such books as may be referred to it by the Director of Public Instruction and to advise him on their suitability, to advise the Educational Department on the steps to be taken for the preparation and publication of new text-books when necessary and to help in forming under the control of the Director of Public Instruction (1) an educational library containing copies of all text-books approved from time to time by the department, copies of text-books approved or prescribed in other provinces of India and in other countries and copies of works on the theory, the practice and the history of education and (2) an educational museum containing plans and models of school buildings and specimens of maps, diagrams, appara-

tus and appliances suitable for schools. The committee consists of 40 members appointed by the Director of Public Instruction, who is the ex-officio president. The committee submits half-yearly to the Director a list of books considered, with its recommendations. The Director publishes lists of books approved for use in institutions under public management and approved for use in recognized institutions under private management.

The classification of institutions

564. Educational institutions are classified independently in three ways. First, they are classified as private institutions and public institutions. All indigenous schools which have not accepted the departmental standards of instruction and all others in which the course of instruction, however advanced, does not conform to the standards prescribed or accepted by the University or by the department are private institutions. Public institutions include all other institutions whether under public management (i.e., managed by Government, by local boards or by municipalities) or under private management; the latter may be either aided by Government, by local boards or by municipalities or financially independent.

Public and private institutions

Recognized schools

565. Schools not managed by Government are divided into "recognized" and "unrecognized." The conditions of recognition (vide the Madras Educational Rules) deal with the general educational qualifications of the staff, the prohibition of political activities among managers, teachers and pupils, the proportion of teachers to pupils, the accommodation and appliances, sanitary inspection, fees, the admission, promotion and withdrawal of pupils, discipline and registers.

566. Secondly, public institutions are classified, according to the standard of instruction provided, into elementary schools (lower and higher), secondary schools, special schools (art, law, etc.), arts colleges (second-grade and first grade) affiliated to the University of Madras and professional colleges (law, etc.) also affiliated to the University. In second-grade colleges the highest instruction is that required for the intermediate examination in arts and science, while in first-grade colleges students are educated for the B.A. honours degree or pass examination. In each of the professional colleges instruction for the corresponding degree examination is given.

English and vernacular schools

567. Lastly, schools may be divided into "English" and "Vernacular." English schools include all schools in which English is used as the general medium of instruction either throughout the school or in one or more of the higher classes or forms. Other schools are vernacular schools.

The training of teachers

568. Examinations are held annually to test the teaching qualifications of the candidates and certificates are granted on the results of these examinations. They are of three kinds:—general teachers' certificates, of

Teachers' certificates

ability to teach the subjects that are ordinarily contained in the curricula of schools for general instruction; technical teachers' certificates, certificates of ability to teach in any one of the subjects included in the Government technical examination scheme; and physical training instructors' certificates. Teachers' certificates are of three grades:—collegiate, granted only to persons who have taken the degree of Licentiate in Teaching in the University, secondary and elementary. There are three grades of technical teachers' certificates, namely, advanced, intermediate and elementary. In each grade, certificates are divided into first and second classes. Examinations for secondary and elementary certificates are held at different centres by the Commissioner for Government Examinations. The examination for the teachers' certificates comprises a written test in pedagogy for the secondary grade and in some subjects of general education also for the elementary grade. Successful candidates are called probationary certificated teachers. After not less than 18 months of satisfactory teaching work in a recognized school probationers are, if suitable, confirmed after a further test. No candidate is admitted to the test for a technical teachers' certificate unless he has passed the advanced or intermediate or elementary technical examination, as the case may be,

in the subject in which he desires to be tested or an equivalent examination. The nature of the examination varies with the subject, but must include a practical test in teaching a class in the subject.

Training institutions

569. Training institutions are divided into three classes, training colleges and secondary and elementary training schools, according to the grade of teachers' certificate for which the pupils are trained. In addition to the colleges at Saidapet and Rajahmundry, Government maintain at present twenty training schools for masters, fifteen training schools for mistresses, and two for physical training instructors. Government also maintain in full the L.T. class attached to the St. Joseph's College, Trichinopoly, and aided secondary training classes attached to the Pithāpur Raja's College, Cocanada, C.M.S. Noble College, Masulipatam, S.P.G. High School, Nandyal, and Thirthapati High School, Ambāsamudram. Local boards from time to time run sessional schools for sessions of a few months; teachers specially appointed for this work move from place to place, their object being to improve the general education of local teachers who have not secured the secondary school-leaving certificate and not to give instruction in the theory and art of teaching. Students from the Madras Presidency are admitted to the Government training institutions free; but outsiders are called upon to pay fees. A course usually occupies two years, but for the L.T. degree it occupies only one year. Stipends are granted by Government to the great majority of the students. Local boards also may grant stipends.

Classification of schools for general education

570. Schools are classified, according to the aims and character of the instruction given in them, into secondary and elementary. Secondary schools prepare their pupils for the University and for professional, commercial and industrial careers. Elementary schools aim more at providing a foundation of general and useful knowledge than at preparing children specially for a course of secondary education; but the education in the three lowest standards is such as to constitute a common foundation for both elementary and secondary education. A much higher standard of staff, buildings and equipment is expected of secondary than of elementary schools and the fees are correspondingly higher.

Paras. 613 and 614

Examinations

571. This simplification of classification and the change in the relations between the secondary and elementary schools have made public examinations marking the transition from one grade of education to another unnecessary and the old primary and lower and upper secondary examinations have been abolished. The University matriculation examination is still held, but the schools have universally taken up the secondary school-leaving certificate scheme, and the number of candidates for matriculation from this Presidency has become negligible.

The S.S.L.C. scheme

572. The need for leaving certificates as evidence of a course of education having been satisfactorily accomplished was, however, recognized. These certificates are of two grades: elementary and secondary. The first are granted on the result of an examination in the ordinary school subjects held in the elementary schools itself by an officer not lower in rank than a sub-assistant inspector. The second are granted by a board of which the Director is the president in accordance with the following scheme. The list of subjects includes all those now studied in schools and any others which seem useful. The subjects are grouped in three divisions known as A, B and C. The A subjects—English, vernacular composition and translation and elementary mathematics—are common to all schools and an annual public examination is held in them. The B subjects—elementary science, geography, history, drawing, physical training, and (for girls) domestic economy and sewing should similarly find a place in every school course. Experience shows, however, that the subjection of pupils to a public examination in these subjects prevents variety and originality of treatment, induces cramming and impairs their value as mental training. There is therefore no public examination in them. The C subjects include more advanced subjects or special branches such as the more specialized parts of elementary mathematics and science, algebra, geometry, physics, chemistry and botany, English history, classical, foreign

and vernacular languages, commercial subjects, agriculture, music, needlework, dress-making, and lace-making; in all these subjects an examination is held. It is to be observed that the scheme makes no subject compulsory but the department expects schools to take up the A and B subjects and a school is not allowed to omit any of them without good reason. It is also intended that each school shall take more than one of the C subjects, and it is hoped that schools will increasingly provide specialized instruction so that a bifurcation of courses resembling that of the modern and classical sides of an English public school may become common. There is ample scope, moreover, for the framing of exceptional courses for exceptional schools. With a view to correcting the prevalent view of school work as a mere preparation for examinations and to securing continuity of effort throughout the school course, the scheme provides for the entry in the certificate of marks granted in school in all subjects for not less than two terms in each of the higher forms, and this is the only evidence of a pupil's progress in the B subjects. The certificates are completed by the entry of the marks obtained in the A and C subjects in the public examination, for which pupils can only appear if their certificates show attendance for a minimum number of days in a year in each of the higher forms. The entry of Presidency and form averages allows of an estimate of the pupil's comparative efficiency. The system therefore gives schools and individual pupils a considerable choice of subjects; a wide freedom of treatment is open to teachers, coupled with the responsibility for their charges' character and work. The entry of special remarks on conduct, physical proficiency, etc., call for an intimate knowledge of individual pupils and it is hoped that this will not only emphasize the importance of moral and physical culture but will also encourage personal interest in pupils. The scheme further makes provision for pupils who obtain certificates of a standard lower than they desire. They can rejoin a school for a year or more to improve their marks in any subject which they have already taken or to take up new subjects.

Government scholarships in schools for general education

573. With a view to enabling pupils of promise to prosecute their studies, the Government award certain scholarships annually. Particulars regarding them are published annually in the *Fort St. George Gazette.*

In elementary schools

574. Special scholarships, tenable for one year, are awarded to deserving Māppilla pupils in the Ernad and Walavanad taluks in Malabar, with a view to subduing, by the spread of education, the ignorant fanaticism of the masses of this community. General scholarships are awarded annually to pupils reading in the higher standards of elementary schools. Special scholarships are given to encourage the education of the children of aboriginal, backward and criminal tribes and classes such as the Koyas, Savaras, Valayas and Koravars; Muhammadans and Ādi-Drāvidas and Ādi-Andhras in secondary schools also have their allotted scholarships. Scholarships are awarded annually to pupils who have completed the fifth standard. They are allotted to districts, but scholarships allotted to male pupils are awarded only to those whose pecuniary circumstances prevent them from prosecuting their studies without assistance. The age of an applicant for one of these scholarships should not be more than 14 years in the case of female candidates, of candidates belonging to the backward classes in non-municipal areas and of Muhammadan and Oriya boys, and 12 years in the case of others. There are also scholarships, tenable for three years, for pupils proceeding from the third to the fourth form. The allotment of these scholarships is similar to that of the ordinary scholarships awarded in the three lower forms. The limit is 17 years in the case of girls, of candidates belonging to the backward classes in non-municipal areas and of Muhammadan and Oriya boys, and 15 years in the case of others. Hindu and Muhammadan widows studying in recognized schools in this Presidency are eligible for special scholarships.

Industrial schools*

575. Industrial schools are under the control of the Director of Industries. There are 41 aided institutions providing instruction to persons of both sexes in various industrial subjects. These institutions

* Vide also Chapter IV "Industries," at pages 186—188.

are scattered throughout the Presidency and are under the immediate charge of a special inspector. In addition to the aided institutions, there are four Government institutions, three of which are situated in Madras and the fourth at Madura. The Madras Trades School aims at supplying the industrial public with intelligent and skilled mechanics, electricians and plumbers equipped with a sound theoretical and practical training. Admission to the school is restricted to *bona fide* apprentices and workmen who are actually engaged in the trade which they wish to study. The classes meet in the mornings and evenings and no fees are charged for tuition. A branch of this school has been established in connexion with the Madras and Southern Mahratta Railway workshops at Perambur. Admission to the classes is restricted to railway apprentices. The Leather Trades Institute provides a three years' course in the principles and practice of leather manufacture. Candidates must have at least a completed secondary school-leaving certificate, but those with higher educational qualifications are given preference. Admission is strictly limited to the accommodation available and candidates who have already worked in a leather works or are the sons of tanners or others employed in the trade are preferred to those who have no previous knowledge or connexion with the trade. Fees are charged for tuition. The Government Industrial Institute, Madura, provides apprenticeships in carpentry and cabinet-making (five years), general mechanical work (five years), short special courses (six months) in engine-driving and the care and management of industrial machinery. The type of instruction provided is almost entirely practical and aims at fitting the students for work as artisans in wood and metal. Special efforts are also made to turn out men capable of taking charge of industrial machinery such as rice mills, cotton gins, pumping installations and other small power-using plants in the mufassal. The institute is provided with a well furnished workshop equipped with power-driven machinery, specimens of different types of engines and model industrial machinery. The hostel attached to the institute is capable of accommodating about 90 apprentices at a time. The Madras School of Arts, established in 1850, aims chiefly at supplementing industrial education. Wood-work, metal-work, jewellery, engraving, lacquer work, carpet-weaving and modelling are the subjects of instruction. There is also a painting department where students can study with a view to painting pictures or to passing the technical examinations in drawing and painting. Some of the pupils in the school are in receipt of scholarships from Government, the Victoria Technical Institute, Madras, and the Native States of Hyderabad and Mysore, but the majority neither receive scholarships nor pay fees. Fees are charged, however, for instruction in drawing and painting taken up for their own sake, but not from *bona fide* teachers who seek admission in order to improve their knowledge of the subjects. The pupils appear for the Government technical examinations.

Technical examinations

576. Technical examinations are held annually under the control of the Commissioner for Government Examinations in 88 subjects under the following heads :—civil engineering, mechanical engineering, electrical engineering, physical science, geology, biology, sanitary science, pharmacy, veterinary science, commerce, vernacular shorthand, drawing, jeweller's work, printing, book-binding, type-founding, leather work, textile fabrics, glass and pottery, tailoring and dress-making and cookery. The examinations, held in Madras and the mufassal, are of three grades,—elementary, intermediate and advanced. They are open to any person who has studied up to the eighth standard of an elementary school and qualified for an elementary school-leaving certificate, or an equivalent in general education. Intermediate examinations are generally held in all subjects but elementary and advanced examinations are held in certain subjects only. The examinations comprise written, oral and practical examinations. Certificates are granted to successful candidates ; group certificates are awarded to candidates who pass all the examinations included in one of sixteen specified groups. There are five other groups of a higher standard ; for passing in all the subjects in one of

these a diploma is granted. Diplomas are granted in veterinary science, electrical engineering, drawing and commerce. Chemists' and druggists' diplomas are awarded to candidates who pass the intermediate examinations in five prescribed subjects and serve satisfactorily for one year in the shop of an approved chemist and druggist.

Government scholarships in technical schools

577. With a view to providing facilities to men of suitable age and skill possessing exceptional initiative in any branch of industry and who seem likely to add considerably to their usefulness by a special training in Europe, eight State Technical Scholarships of the value of £200 plus 25 per cent bonus have been instituted. These scholarships are awarded for not less than two or more than five years. The nominations are made by a board specially constituted for the purpose. Fifteen scholarships of the value of Rs. 60 per mensem tenable at the Indian Institute of Science, Bangalore, have been instituted with a view to providing adequate facilities for the technical training of intending chemists. The scholarships are awarded for study in the departments of applied chemistry, bio-chemistry and electrical technology. Six scholarships per annum of the monthly value of Rs. 60 tenable at the Victoria Institute, Bombay, are awarded to students of this Presidency. The minimum educational qualifications required of the applicants is a completed secondary school-leaving certificate. The scholarships are tenable for a period of four years, and are awarded for the study of applied chemistry, sanitary engineering and plumbing, and textile manufacture. Sixty scholarships tenable for five years are awarded annually by the Director of Industries to pupils learning a trade or profession in recognized industrial schools, or to selected apprentices (boys or girls) serving properly arranged apprenticeships for a specified term of training in workshops or mills where suitable provision is made for class instruction. The aim of these scholarships is to encourage deserving apprentices and pupils to complete their whole apprenticeship or period of training at one institution or workshop, and so to some extent to check the present tendency of apprentices to move from workshop to workshop in search of a few annas' increase in wages to the detriment of their training and the annoyance of their employers. These scholarships, which are ordinarily awarded to the members of the artisan class or to others whose families are already engaged in the trade, rise in value from Rs. 1-8-0 in the first year to Rs. 7-8-0 in the fifth year and a yearly bonus is given for good work.

Grants-in-aid

578. The Local Government exerts considerable influence over education not only directly by the maintenance of institutions from provincial funds and by the exercise of the extensive powers of control vested in them over local boards and municipal councils by the Acts relating to those bodies, but also indirectly by making grants to managers of institutions under private management on condition of compliance with certain regulations and by allowing local boards and municipal councils to make similar grants towards the cost of maintenance of elementary schools on the recommendation of officers of the Educational Department. If aid is sought on behalf of an institution, the conditions of recognition must be fulfilled unless the institution has been exempted from their operation. The recognition of secondary schools vests in the Director of Public Instruction, while the recognition of elementary schools vests in the District Educational Councils formed under the Madras Elementary Education Act. Text-books which are not included in the authorized list of text-books may not be used in aided institutions without the express sanction of the Director. The whole income of an aided school must be devoted to educational purposes.

Teaching grants
(1) To elementary schools

579. The systems of distributing grants differ in elementary schools for Indians, secondary schools for Indians, colleges and special schools and European schools. Teaching grants in elementary schools are given on the basis of the number of teachers and vary according to the grade of instruction given and the teachers' qualifications. The grants may be reduced or suspended in cases where there has been falsification of the registers or misrepresentation regarding the employment of teachers or the attendance of pupils, or violation of any of the conditions of recognition

and aid or any other irregularity. They may also be increased by 50 per cent for any improvement in efficiency, more especially for the introduction of any method of teaching calculated to train the children's faculties and powers of expression and observation, proper attention to physical exercise and generally any attempt to fit the children to their position in life and diminished by 20 per cent for inefficiency. These grants are paid by District Educational Councils out of funds placed at their disposal by Government.

(2) To secondary schools

580. In secondary schools teaching grants are intended to supplement equally the income guaranteed from endowments, subscriptions, donations and other private sources and in practice the sum assigned usually amounts to half the net cost of the school, excluding expenditure on account of which grants can otherwise be given, such as on new building furniture and apparatus, and assuming that fees are received from all pupils at rates fixed by Government and called the standard rates.

(3) To colleges

581. The grants for colleges and special schools are fixed by the Director after taking into consideration all the facts of the case.

(4) To European schools

582. Grants for European schools are fixed for three years by the Director on general considerations. Grants are also made towards stipends, to managers of training institutions, to students in technical schools, for the maintenance of European children, for school buildings, for hostels or boarding houses for students, for furniture, books and appliances required for schools, public libraries and reading rooms. In many cases the amount of grants depends on the sums contributed by managers of institutions or private persons. Full details regarding grants will be found in the Grant-in-Aid Code.

The University of Madras

583. The University of Madras was constituted in 1857 under the Act of Incorporation (Act XXVII of 1857) on the model of the University of London. The constitution was revised by the Indian Universities Act, 1904. The University is mainly an examining body; it confers degrees in arts (including teaching), science (including agriculture), law, medicine and engineering and grants diplomas in economics and in oriental learning. From part of the non-recurring and recurring grants made by the Government of India to encourage the development of teaching in the University, provision has been made for University professorships and readerships in the subjects of Indian economics and Indian history and archæology. A University professorship of comparative philology was in existence for five years, but, after the expiry of the term of the first holder, has not been renewed. With a view to help in the work of the honours courses and to make provision for post-graduate study and research, the University arranges for annual courses of ordinary University lectures and, occasionally, for special University lectures and also awards annually a number of research studentships. Financial considerations, however, have made it impossible for the University to make any definite advance in the direction of direct teaching or to supplement to any appreciable extent by means of University teaching the instruction given in affiliated colleges. The University was dependent entirely on its own resources for the maintenance of its activities until 1913, since when it has received from the Government of India non-recurring grants amounting to Rs. 7 lakhs and an annual recurring grant of Rs. 0·65 lakh, and from the Local Government a sum of Rs. 1·24 lakhs. Out of these grants provision has been made for new University buildings, a professorship, an assistant professorship, and two readerships in Indian economics, and a professorship of Indian history and archæology, for the purchase of books and manuscripts for the University library, and for the completion of a new Tamil lexicon which is now in progress. The Senate consists of a Chancellor, Vice-Chancellor, a certain number of ex-officio fellows, and 100 ordinary fellows. Of the fellows a certain number are elected in accordance with the terms of the University Act, and the rest are nominated by the Chancellor. There are five Faculties—Arts, Science, Law, Medicine and Engineering. The executive government of the University is vested in the Syndicate, which consists of the Vice-Chancellor as Chairman, the

The Senate and Faculties

The Syndicate

Director of Public Instruction as an ex-officio member, and twelve other members elected by the Faculties and the Senate. The Syndicate appoints examiners, makes all the arrangements for the conduct of examinations, appoints members of boards of studies, keeps the accounts of the University, and exercises various powers consistent with the provision of the regulations.

The Registrar

The Registrar is secretary to the Syndicate and is an officer appointed by the Syndicate subject to the confirmation of the Senate. He is appoint de for five years in the first instance, but, if reappointed, will be a permanent officer.

Boards of studies

There are, at present, nineteen boards of studies in the several branches of learning ; no board consists of less than three or more than twelve members. Members of each board hold office for three years. All persons possessing the necessary special knowledge are eligible whether fellows or not. The boards are empowered to submit for the consideration of the Syndicate nominations of examiners and assistant examiners in their respective branches, to recommend text-books from year to year, to consult specialists who are not fellows of the University, and to consider and report on all matters referred to them by the Syndicate.

The examiners

Heads of affiliated colleges, members of the boards of studies and fellows of the University are competent to recommend persons to be appointed examiners, and the Syndicate finally sanctions their appointment. Each of the boards of examiners suggests to the Syndicate the names of such assistant examiners as it considers to be specially qualified in its particular subject.

Honorary degrees

584. The power of conferring honorary degrees was granted in 1884. The honorary degree of Doctor in the Faculty of Law has been conferred on two persons, the Rev. William Miller, M.A., LL.D., D.D., C.I.E., and Sir S. Subrahmanya Ayyar, K.C.I.E.

Ordinary degrees

585. Entrance to a University course is by matriculation, which may be effected either by obtaining admission to an affiliated college on the strength of a secondary school-leaving certificate, the holder of which has been declared by the Syndicate to be eligible for such admission, or by passing the matriculation examination of the University or some other examination accepted by the Syndicate as an equivalent. As the first method of matriculation has almost entirely displaced the second, a description of the matriculation examination is unnecessary. The first University examination after matriculation is the intermediate examination in arts and science. This must be passed by all persons proceeding to a degree in arts, in science, in medicine, in engineering or in agriculture, and they appear for it two years after matriculation. It consists of three parts—(Part I-A) English language and literature, (Part I-B) vernacular composition or translation from a classical or foreign language, and (Part II) any one of the following groups :—(i) mathematics, physics and chemistry, (ii) natural science, physics and chemistry, and (iii) any three of the following subjects : (*a*) ancient history, (*b*) modern history, (*c*) logic, (*d*) a classical language, (*e*) a second classical language or one of the foreign or Indian vernacular languages.

Arts

For the degree of B.A., candidates may take either a pass or an honours course. The first occupies two years and the second three years. The subjects for the first course are English and either mathematics, physical science, natural science, logic, psychology and ethics, history and economics, two languages other than English already studied in the intermediate course. The subjects for the honours courses are English and one of the following branches of knowledge :—mathematics, mental and moral science, history, economics and politics, two languages other than English, English language and literature, Sanskrit language and literature, Arabic language and literature. The compulsory English part of the examination is much less extensive for the honours course than for the pass course. A graduate in honours may, on payment of a fee of Rs. 25, be admitted to the degree of M.A., without further examination after the lapse of five years from the date of his having passed the intermediate examination. A Bachelor of Arts of the University, after an interval of two years from the date of qualifying for that degree, may further qualify for the M.A. degree by passing an examination in any one of the subjects specified for the B.A. honours course.

586. Degrees of Bachelor of Science, Bachelor of Science (honours) and Master of Science have been instituted in the University. Undergraduates who have passed the intermediate examination may proceed either to the B.Sc. degree or to the B.Sc. (honours) degree after undergoing a course of study respectively for two years or three years in the following branches of knowledge:—English as prescribed for candidates for the B.A. degree in composition and nineteenth century prose: mathematics, physics, chemistry, botany, zoology and geology. In the case of the B.Sc. degree the candidate must take any three of the optional subjects specified, while in the case of the B.Sc. (honours) course a candidate who takes the physical sciences must take one as the main subject and the other as subsidiary; and if he takes the natural sciences he must take one of them as main and the other two as subsidiary. The M.Sc. degree is conferred on B.Sc. (honours) men on production of satisfactory evidence of research work for not less than one year after passing the B.Sc. (honours) examination and on the submission of approved theses on the results of original research. Graduates may appear, after satisfactorily completing a course of one year in a college affiliated in teaching, for the examination for the L.T. degree. This course is in three parts: (1) general principles of teaching, (2) the methods appropriate to the teaching of English, and (3) the methods of teaching one of the following groups of subjects:—(*a*) all subjects to young children, (*b*) mathematics, (*c*) physical science, (*d*) natural science, (*e*) history, (*f*) geography, and (*g*) one language other than English. Science

587. The University has quite recently instituted a new Degree of Bachelor of Science in Agriculture (B.Sc.Ag.). Candidates for this degree must have passed the intermediate examination, taking either group I (mathematics, physics and chemistry) or group II (natural science, physics and chemistry), and, after having subsequently undergone a further course of study in agriculture extending over three years at a college of agriculture affiliated to the University, must pass the prescribed examination for the degree. The examination is in two parts. The subjects for Part I of the examination are:—agricultural chemistry, agricultural botany including mycology, agricultural engineering, animal hygiene, agricultural zoology, and agriculture; and those for Part II of the examination are:—agriculture, agricultural botany and agricultural chemistry. Agricultural Science

588. The University instituted in 1918 an examination for a diploma in economics for the furtherance of economic studies in the University. The classes for the diploma course, which consists mainly of economics and allied subjects such as currency and banking, are conducted by a permanent staff of University teachers. Economics

589. The University instituted in 1918 examinations for titles in oriental learning. The titles conferred are *Siromani*, *Vidvan*, *Afzal-ul-ulama* and *Munshi-i-Fazil*. Candidates for the *Siromani* title should offer for their examination Sanskrit alone, and those for the *Vidvan* title either Sanskrit and any one of the Dravidian languages, or Sanskrit and Oriya, or a Dravidian language as main language and Sanskrit as subsidiary, or any two of the Dravidian languages. Candidates for the *Afzal-ul-ulama* title should offer Arabic alone for their examination, and those for the *Munshi-i-Fazil* title Persian as the main language and Urdu as the subsidiary language. A degree of Master of Oriental Learning was instituted in 1922 to be conferred on holders of certificates of proficiency in oriental learning, on their submitting original theses in English on some subjects connected with the special subjects to which their certificates of proficiency relate. Oriental studies

590. Candidates for the first examination in law must have taken the B.A. or other accepted degree and have attended courses of lectures in the prescribed subjects at a recognized law college for two consecutive terms. The subjects of the examination are jurisprudence, Roman law, the law of contracts, the law of torts and Indian constitutional law. No candidate may appear for the B.L. degree examination until he has passed the first examination in law and attended courses of Law

lectures in the prescribed subjects at a recognized law college for two terms. Candidates are examined in the theory of law of property, Hindu and Muhammadan law, the law of evidence, the principles of land tenure in the Madras Presidency and criminal law. Candidates for the degree of Master of Laws are not admitted to the examination until two years have elapsed from the date on which they passed the B.L. degree examination: they are examined in one of four branches. Successful candidates in each of these three examinations are arranged in three classes in the order of proficiency.

Medicine

591. The degrees in medicine conferred by the University are L.M. & S., M.B. & B.S., M.D., M.S., and B.S.Sc. The courses of study for the M.B. & B.S. and L.M. & S. degrees are identically the same and occupy normally a period of five years; and candidates have to pass four examinations—the first, second, third and final M.B. & B.S., or L.M. & S. examinations. The examinations for both the degrees are also identical, the same papers being answered by the two sets of candidates, but the candidates for the M.B. & B.S. degree must obtain a higher minimum for a pass in each subject than those for the L.M. & S. degree. The examinations are partly written and partly oral and practical. The subjects for the first examination for the M.B. & B.S. or L.M. & S. degree are:—inorganic chemistry, physics and general biology; the second examination comprises anatomy, physiology, organic chemistry and materia medica; the third examination includes general pathology and hygiene; and the final examination includes medicine, surgery, midwifery, medical jurisprudence and ophthalmology. Candidates for the degree of M.D. or M.S. must have taken the degree of M.B. & B.S. or of L.M. & S. and must pass written, clinical, and oral examinations. The examination for the M.D. degree is in either medicine (including mental diseases) and pathology, or midwifery (including diseases of women and children) or pathology (including medicine) or tropical medicine. The examination for the M.S. degree is mainly in surgery including surgical anatomy and pathology and in one out of five special subjects such as ophthalmology and dental surgery. Persons who have passed the M.B. & B.S. or L.M. & S. degree examination or an equivalent examination may appear for the B.S.Sc. degree examination. The examination is in two parts: (1) chemistry, physics, geology, meteorology and engineering, bacteriology and parasitology; and (2) general hygiene and medicine in relation to public health, sanitary law, vital statistics, and vaccination. Candidates must also write a special report under the direct supervision of an examiner on the sanitary conditions of some actual locality.

Engineering

592. The only examinations in the faculty of engineering are the first examination in engineering and the examination for the degrees of Bachelor of Engineering. Candidates who appear for these examinations must have passed the first or the intermediate examination in arts and the first examination in Engineering respectively. They must have undergone certain courses of instruction. The subjects for the first examination are mathematics (pure and applied), physics, chemistry, elementary applied mechanics, drawing and practical surveying. There are two branches for the B.E. degree examination,—civil, which includes mathematics, civil engineering and building estimating, topographical drawing and surveying field work, and mechanical, for which mathematics, mechanical engineering and machine drawing, estimating and workshop tests are prescribed.

Graduates

593. Up to the 31st December 1921, 720 graduates had proceeded to the degree of Master of Arts. The number on the rolls at present is 656, of whom 505 are Brāhmans, 85 non-Brāhmans, 53 Indian Christians, 5 Muhammadans, 7 Europeans and 1 a Jain. Of the 99 Masters of Laws on the rolls, 87 are Brāhmans, 9 non-Brāhmans, 2 Indian Christians and 1 a European. Of the 4,756 Bachelors of Laws, 3,477 are Brāhmans, 994 non-Brāhmans, 223 Indian Christians, 22 Europeans and 30 Muhammadans. Out of 779 Bachelors of Arts (honours) 544 are Brāhmans, 151

non-Brāhmans, 85 Indian Christians, 11 Europeans and 8 Muhammadans. The total number of Bachelors of Arts on the rolls is 18,109 ; of these, 12,042 are Brāhmans, 3,888 non-Brāhmans, 1,687 Indian Christians, 248 Europeans, 229 Muhammadans, 8 Parsees, 3 Jews and 4 Jains. Of the 229 Bachelors of Engineering, 172 are Brāhmans, 24 non-Brāhmans, 24 Indian Christians, 8 Europeans and 1 a Parsee. Out of the 2,183 Licentiates in Teaching, 1,590 are Brāhmans, 225 non-Brāhmans, 316 Indian Christians, 42 Europeans, 9 Muhammadans and 1 a Parsee. Out of 547 Licentiates in Medicine and Surgery, 205 are Brāhmans, 172 non-Brāhmans, 92 Indian Christians, 62 Europeans, 9 Muhammadans and 7 Parsees ; and of 263 Bachelors of Medicine and Surgery, 111 are Brāhmans, 77 non-Brāhmans, 48 Indian Christians, 22 Europeans, 3 Muhammadans, 1 a Parsee and 1 a Jew ; out of 8 Bachelors of Sanitary Science, 6 are Brāhmans and 2 non-Brāhmans. There are only 15 Doctors of Medicine on the rolls of the University ; of these 6 are Brāhmans, 5 non-Brāhmans, 3 Indian Christians and 1 a European.

Sources of income

594. Fees levied from candidates for examinations form the chief source of income of the University. The examination fees range from Rs. 5 to Rs. 100. There are also other sources of income such as fees for registration and convocation, etc. The Local Government make an annual contribution of Rs. 30,000 to the University, as compensation for the loss of income caused by the introduction of the secondary school leaving certificate public examination, which has practically taken the place of the University matriculation examination. The University also administers many endowments instituted for the award of scholarships, prizes and medals.

Affiliation of colleges to the University

595. Colleges or departments of colleges may be affiliated to the University in arts or in science, or in a department of arts or of science, in law, medicine, commerce, agriculture or engineering. The affiliation is given specifically for each subject or group of subjects, and for each separate standard in each of the faculties. A college applying for affiliation must be situated within the territorial limits of the University and should comply with certain specific conditions laid down in the rules, the chief of which are that the management of the college should be in the hands of a regularly constituted governing body on which the teaching staff is represented, that the buildings, library, laboratory equipment, etc., should be suitable, and that the financial resources of the college are such as to make due provision for its continued maintenance. The rules of affiliation further include conditions regarding the submission of any returns required by the syndicate ; the maintenance of such registers and records as are prescribed by the syndicate ; periodical inspection of colleges ; and the quartering of students who are not living with their parents or guardians in hostels approved by the college authorities. The principals and professors of affiliated colleges managed by the Government are generally members of the Indian Educational Service.

Affiliated colleges

596. There are in all fifty-one colleges affiliated to the University in Arts and Science ; of these, 33 colleges are affiliated only in the intermediate courses, 18 colleges in the B.A. degree courses, 4 colleges in the B.A. (honours) courses and only one college for the B.Sc. degree course. There are three training colleges affiliated in the L.T. degree course ; two law colleges, including one in Travancore, affiliated in the B.L. degree course ; one medical college, one college of engineering and one Agricultural college affiliated in the new courses for the B.Sc. Agricultural degree. Of the above colleges, fifteen are maintained by the Government of Madras, twenty-one by Christian missions, seven by Native States and the rest either by local boards or by private bodies. Scholarships tenable in any affiliated college are annually awarded by Government to enable persons to continue their education beyond the secondary stage, the education of girls, Oriyas, Māppillas and Muhammadans, receiving special consideration.

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Arts colleges

597. The Government maintain 10 arts colleges, one of which, Queen Mary's College, Madras, which is of the first grade, is intended for women. Of the remaining nine colleges, the Presidency College, the

Government Muhammadan College and the colleges at Kumbakōnam, Rajahmundry and Anantapur, are of the first grade, the Presidency College being affiliated for the honours courses also. The colleges at Coimbatore, Palghat, Tellicherry and Mangalore, are of the second grade and are affiliated for courses for the intermediate examination.

The Law College

598. The Law College, Madras, is at present the only educational institution in the Presidency itself which affords facilities for the study of law. It was founded in 1891 as it was found that the law classes formerly attached to the Presidency College were unwieldy and the course of instruction was inadequate. The ostensible aim of the college is instruction in the theory of law ; practically it is intended to afford instruction to students preparing for the various examinations in law. It is affiliated to the Madras University. The rules regulating its constitution and working are sanctioned by the Local Government. The staff consists of a principal, two professors and 6 assistant professors appointed by the Local Government. The general management of the college is vested in a council, subject to the general control of the Director of Public Instruction ; the council consists of two or more Judges of the High Court, the Principal, the Advocate-General, two professors and such other members as may be appointed by Government ; the executive management of the college is vested in the principal who is independent of the council in all matters of discipline. The college contains four kinds of classes ; (1) M.L. classes ; (2) B.L. classes ; (3) pleadership classes ; and (4) special classes for students attending the college but not preparing for the University or pleadership examinations. Fees are levied at half rates from Muhammadans and Oriyas. There are two terms a year. Lending and consulting libraries are attached to the college.

The Medical College

599. The medical school established by Government in 1835 became a college in 1851. The control of the college was transferred in 1855 from the Medical Board to the Director of Public Instruction and in 1911 from him to the Surgeon-General ; in 1857 the college was affiliated to the University of Madras. The government of the college is, subject to the general control of the Surgeon-General, now vested in the principal, who is aided by a consultative council composed of all the professors and of any other members who may be appointed by Government. The staff consists of a principal, twelve professors, two lecturers, twenty-three assistant professors and a physical training instructor. The college contains four departments, (i) the College department, in which students are prepared for the M.B. & B.S. and the L.M. & S. degrees ; (ii) the Assistant Surgeons' department, consisting only of military pupils, selected by the Director-General, Indian Medical Service, for qualifying as military Assistant Surgeons, and of female pupils ; (iii) the Chemist and Druggist department ; and (iv) the Sanitary Inspectors' department. Attendance at the lectures given in the Medical College is recognized in Great Britain as partial qualification for degrees and diplomas granted in that country. Numerous scholarships, medals and prizes are awarded to students of the College. Museums, a library and a gymnasium are attached to the College. Students have also the advantage of attending classes held in the General Hospital, the Government Ophthalmic Hospital, the Government Maternity Hospital and the Lunatic Asylum.

The College of Agriculture

600. In the year 1876 a School of Agriculture was established at Saidapet. Prior to this date instruction of an elementary character had been given to a few apprentices. In 1878 the name of the institution was changed into that of "Agricultural College." The principal of the college was then also the Superintendent of the Government Farm at Saidapet. The educational side of his work was controlled by the Director of Public Instruction, while his practical administration was under the control of the Board of Revenue. In 1885 the farm was abolished and the college came under the sole control of the Educational Department. The growth of agricultural science and research led to the moving of the college to its present site at Coimbatore in 1906 ; the first batch of students entered the college in June 1908 and diplomas

were first awarded in March 1911. Attached to the college are a hostel for students and quarters for the staff. The general farm and college estate occupy about 500 acres, of which about 340 acres are under cultivation. In addition to ordinary farm buildings there are a dairy, workshops and a veterinary hospital, and three plant-breeding stations for cotton, paddy and sugarcane. The responsibility for the discipline and management of the college is vested in the principal, subject to the control of the Director of Agriculture. There are a number of scientific sections of an instructional or scientific nature in the college, each in charge of a member of the Indian Agricultural Service under the direct control of the Director of Agriculture. The instruction given at the college is designed to be a practical and scientific training for those who intend to make agriculture their profession. The college was affiliated to Madras University early in 1922 when the University degree of B.Sc.Ag. was instituted. The courses of instruction provided are (1) a two-years' course of a practical nature in which scientific instruction as such plays no part ; a certificate of proficiency is awarded to competent students ; and (2) a three-years' course, leading up to the degree of B.Sc.Ag. in which a thorough training in the practice and theory of scientific agriculture is given. Students are required to have passed completely the intermediate examination in arts of the Madras University and should be qualified in Group I or II. Free tuition and lodging are given to students of the Presidency and of Coorg. A certain number of Government scholarships of the value of Rs. 25 per mensem are offered to students entering the degree course and there is one private scholarship of Rs. 110 per annum for which students from Malabar are eligible. Successful students have the prospect of employment as managers or agents to zamindars, planters and estate owners, or in the Government Agricultural Department.

The Veterinary College

601. In 1903 the Veterinary College at Vepery, Madras, was instituted, in connexion with the Society for Preventing Cruelty to Animals infirmary, to meet the pressing demand for subordinates trained in veterinary duties. The college affords theoretical and practical instruction, with the object of training men for service under Government, municipalities, local boards or private employees. The present staff of the college consists of a principal, two other Imperial officers, an assistant principal, three lecturers and two assistant lecturers. The responsibility for the discipline and management of the college is invested in the principal who is under the direct control of Government in the Development Department. A veterinary hospital, a bacteriological laboratory, a shoeing forge and a hostel are attached to the college. The age limits for admission to the college are from 18 to 22 years. Except in the case of Europeans and Anglo-Indians, educational qualifications of a school final examination standard are demanded. All students are on probation for the first two months of the three years' course. During the first year students are given practical instruction in nursing, dressing, handling, casting and securing animals as well as in the names of the instruments and appliances used in ordinary practice. In the second year they attend hospital practice and receive clinical instruction. They also attend at the forge and pharmacy, carry out dissections and perform operations on dead subjects. During the third year they perform the duties of clinical clerks and dressers, perform operations on dead subjects and afterwards on living animals, conduct postmortem examinations and carry out practically all the duties appertaining to their profession. The tuition is free to all students who execute an agreement binding themselves to serve Government for five years, if required, after completing their course in the college satisfactorily. All others are required to pay tuition fees in advance at the rate of Rs. 400 per annum. Forty students are admitted to the college each year and all are awarded scholarships ; five of the forty scholarships are reserved for Muhammadans. Students who are in the enjoyment of Government scholarships are required to refund the amount they have received as stipends and to pay tuition fees if they leave the college without sanction or are expelled for misconduct. A diploma of graduation in veterinary science is awarded to students who pass the final

examination on the completion of their course. Graduates of the college are eligible for appointment to posts in the Provincial and subordinate services in this Presidency, but Government are under no obligation to find employment for them.

The Engineering College

602. The Engineering College at Guindy, Madras, established in the year 1794 as a survey school, developed into a civil engineering college in 1857. It received official recognition in 1886 and was affiliated to the Madras University in 1877. It affords theoretical and practical instruction in the professional duties of engineers and subordinate engineers. The responsibility for the discipline and management of the college is vested in the principal, under the control of the Director of Public Instruction. The full staff consists of a principal, six professors, a number of instructors and assistants who are recruited from the cadre of the Department of Public Works, a workshop instructor and an instructor in physical training. The college contains two classes : a five years' engineer class for training civil and mechanical engineers and a four years' course subordinate class for training subordinates for the Public Works Department, Revenue Department, local boards and municipalities. Casual students are also admitted to the engineer class. Students in the higher course of engineering are prepared for the B.E. degree examination of the Madras University. Government awards scholarships tenable in the college and there are also certain endowed scholarships. Some of the students of the engineering class who proceed to the Perambur workshops of the Madras and Southern Mahratta Railway, the central power station of the Madras Electric Supply Corporation, the Madras harbour works, or the Madras water-supply and drainage works, receive a refund of half the premium charged, if their subsequent work gives satisfaction. Four stipends are awarded annually to persons to be trained as teachers in technical or industrial schools. On his successful completion of a course in either of the two classes a student is granted a diploma, and this diploma gives him a prior claim to certain appointments in the Public Works Department and under local boards.

The Teachers' College, Saidapet

603. This institution, established as the Government Normal school in 1856, was converted into a college and affiliated to the University in 1886. The staff consists of a principal, a vice-principal, five lecturers and instructors for manual training, drawing and physical training and a number of assistants. The college is intended primarily for the training of graduate teachers from the Presidency, but if accommodation is available students from Native States are admitted. A secondary training class is attached to the college. The students, who receive stipends from Government ranging from Rs. 12 to Rs. 20 per mensem, according to their qualifications, are trained for the L.T. degree examination of the Madras University. Instruction is also given to the students in physical training, drawing and manual training and they may appear for public examinations in these subjects. A model school of the secondary standard is attached to the college and has an independent staff of teachers. There is also a kindergarten department presided over by a European lady. The college has a large library and an educational museum. Connected with the college are a teachers' association, of which all the students are members, a reading room and recreation club and a hostel. The college accommodation is extensive and it is provided with a well equipped laboratory for physical and natural science.

The Training College, Rajahmundry

604. The Training College, Rajahmundry, which was abolished in 1911, was re-opened in 1917 with a view to providing for the training of graduate teachers in Telugu districts. The staff consists of a principal, a junior professor of education, three lecturers and instructors in drawing and physical and manual training. The college prepares students for the L.T. degree examination but has not been affiliated to the University. Attached to the college are a model school of the secondary standard with an independent staff of teachers and a secondary training section.

The Lawrence Memorial School *Para. 629*

605. In the year 1856 Sir Henry Lawrence, K.C.B., offered a donation of Rs. 5,000 and a subscription of Rs. 1,000 a year, so long as he might be in India, for the establishment at some hill station in this

Presidency of an institution on the lines of the Lawrence Asylums at Sanawar and at Mount Abu, for the benefit of children of soldiers of the British army who were serving or had served in Madras. The Lawrence Asylum was accordingly established in 1858 at Ootacamund with the aid of the foundation money and of subscriptions raised in the army and in England. It was amalgamated with the Madras Military Male Orphan Asylum in 1871 on the completion of the new buildings at Lovedale near Ootacamund. Though the Asylum does not belong to Government, it is largely controlled by Government, who have sanctioned a code of rules relating to its management and constitution and furnish it with two fixed annual grants-in-aid amounting to Rs. 54,000. The institution consists of branches for boys and for girls, the maximum strength of the branches being 300 and 165. It is intended for European and Eurasian children, especially the orphan children of military officers and soldiers. The management of the Asylum is vested in a committee, of which the General Officer Commanding Madras district is ex-officio chairman and the principal is ordinarily the secretary. The staff consists of a principal, a headmaster in the branch for boys, a headmistress in the branch for girls and several assistant teachers in each branch. Instruction in literary subjects is given to boys as far as the standard of the European schools high school examination, but only such pupils as would clearly benefit by a high school education are allowed to go beyond the middle school. Instruction is also given in technical subjects such as shorthand, typewriting and telegraphy, and special classes are held for pupils preparing for the medical and railway examinations. Religious instruction of a non-sectarian character is given, but visits from clergymen of the various denominations are permitted. Scholarships are awarded to pupils of promise to enable them to complete a course in an arts or a technical college or for industrial training in some well-known firm or institution. Stipends are also given to girls to enable them to be trained as teachers.

The Public Service Examination

606. No person can be appointed in this Presidency to a Government post carrying a salary of Rs. 35 per mensem in the mufassal or Rs. 40 per mensem in Madras City or more, unless he has passed with success through the secondary stage of education. Government accept as evidence of this standard a pass in the matriculation examination of any Indian University, in a school final examination, in the European schools high school examination, or in certain examinations held in Great Britain, or a Madras secondary school-leaving certificate showing knowledge in English, elementary mathematics and vernacular composition and translation and in at least one of the other subjects selected by the candidate. Persons in the public service have to pass certain special tests before they can hold some of the higher appointments; these tests include translation, accounts, civil judicial, criminal judicial, revenue and jail tests.

The Commissioner for Government Examinations

607. For the conduct of examinations held by Government, the office of Commissioner for the uncovenanted Civil Service examinations, or, as the office is now called, Commissioner for Government Examinations, was instituted in 1860. It was entrusted at first to the Director of Public Instruction, subsequently to a member of the Board of Revenue, and finally in 1880 to the Director of Public Instruction. Examiners are appointed by the Commissioner and are paid out of the fees realized from the candidates. Most of the examinations prescribed for entry into or promotion in the various departments of the public service are conducted by the Commissioner. The examinations are held at a large number of centres in the Presidency, and in some cases in the Native States.

Paras. 626—628

The Board of Examiners

608. The junior officers of the various Government departments are required to pass tests in such subjects as languages, law, and departmental rules, and high proficiency in the vernaculars is encouraged by the granting of rewards after examination. To conduct these examinations, the Board of Examiners has been constituted and the president selects examiners from the board. The present board consists of a president who

is usually a member of the Board of Revenue, certain ex-officio members, and a varying number of special members appointed by Government from time to time. The Accountant-General, Inspector-General of Police, certain Conservators of Forests, the Chief Presidency Magistrate, the Professor of Medical Jurisprudence in the Medical College, the Registrar of the High Court and the Translators to Government are ex-officio members of the board. The officers who are examined by the board include members of the Indian Civil Service, Police officers, Forest officers, Cantonment Magistrates, officers of the Provincial Service, officers of the Agricultural, Veterinary and Fishery departments, European and Anglo-Indian officers of the Educational department, and European and Anglo-Indian officers of other Civil departments in the Presidency. Military officers, including commissioned medical officers who are District Medical and Sanitary officers are examined only in the vernacular languages. Ladies related to European officers in the employment of Government, the railways, the Imperial Bank of India and certain firms are eligible for examination in the vernacular languages and for the rewards granted for proficiency. The examinations are usually held twice a year (in January and July) at Madras but may, in some cases, be held simultaneously at other centres. The tests for officers of the Salt, Abkāri and Customs departments are also conducted by this board through examiners appointed from the department.

Pleadership examination

609. The pleadership examination was instituted in 1879 for the purpose of ascertaining the qualifications of persons desirous of becoming pleaders in courts subordinate to the High Court, with reference to the rules framed by the High Court under section 6 of the Legal Practitioners' Act XVII of 1879. The board consists of a Judge of the High Court, the Advocate-General, the Government Pleader, the Principal of the Law College, a Barrister and a High Court Vakil, with the Deputy Registrar of the High Court, Appellate Side, as member and secretary. The examination is held once a year at Madras. The High Court from time to time prescribes the subjects of examination and determines the general qualifications and standard of proficiency for the first-grade certificate. Examiners are appointed by Government to conduct each examination on the recommendation of the examination board.

EDUCATION (1921-22)

[*Report on Public Instruction in the Madras Presidency for the year 1921-22, and for the quinquennium 1916-17 to 1921-22; Statistics of British India, Vol. V, Education*]

Progress in the quinquennial period

610. The quinquennium has been one of considerable progress in all branches of education. The chief events have been the creation of the Ministry for Education under the Government of India Act, the passing of the Elementary Education Act, the re-organization of the Imperial and Provincial services, the creation of two additional posts in the Indian Educational Service in the Office of the Director of Public Instruction—one of an additional Deputy Director of Public Instruction and the other of the Deputy Directress,—the re-organization and expansion of the inspecting agencies, the introduction of the model school scheme and the increase in the number of Government colleges and schools.

General statistics

611. The total number of public institutions rose by 1,400 to 37,204 and their strength by 53,820 to 1,742,493 during the year, while the number of private institutions decreased from 3,927 with 111,177 pupils to 3,443 with 94,529 pupils. Classified according to management, out of a total of 40,647 schools and colleges, 10,894 were under public management, Government managing 948, municipal councils 1,103 and local boards 8,843. The remaining 29,753 were under private management, 23,322

being aided from public funds, 2,988 unaided and 3,443 indigenous and private schools. During the quinquennium, the total number of public institutions rose by 5,928 to 37,204, i.e., by 18·9 per cent, and their total strength by 208,442 to 1,742,493, i.e., by 13·6 per cent. Private institutions showed a decline of 27·8 per cent in number and of 25·5 per cent in strength. Taking public and private institutions together, the number of institutions and their strength rose by 12·8 per cent and 10·6 per cent, respectively, during the quinquennium. While the number of institutions under public management as well as those aided from public funds showed a steady increase, unaided institutions decreased considerably. The percentage of male scholars to the male population increased from 6·5 in 1916–17 to 7·0 in 1921–22 and the corresponding percentage for female scholars rose from 1·5 to 1·8; the percentage of the total number of scholars of both sexes, to the total population, rose from 4·0 to 4·3. All the districts except Tanjore and Trichinopoly showed an increase in the percentage of scholars to population.

Collegiate education

612. Besides the ordinary University lectures delivered for the benefit of honours students, arrangements were made for the delivery of special University lectures by persons eminent in arts and science. The committee appointed for the conduct and management of the work in connexion with the preparation of the Tamil lexicon has finished the preliminary work of selecting and defining words and the work is now under final revision by a special committee. Alterations in the regulations were made to provide for the conduct of the Intermediate, B.A., B.A. (honours), preliminary and L.T. degree examinations twice a year. The University has made arrangements for the preservation and publication of the works of the late Mr. S. Ramanujam, F.R.S. The formation of No. 5 (Madras) Company, University Training Corps, for which sanction has been received, is now in progress. The number of Government arts colleges rose from 6 to 10 as a result of the Government taking over the Palghat and Tellicherry colleges from municipal management and the Coimbatore College from the management of a committee and opening the Muhammadan College, Madras. The last-named and the Ceded Districts College, Anantapur, were raised to the first grade. The total number of arts colleges for men and women rose from 34 to 39 and their strength from 7,724 to 8,227. The number of women students in arts colleges also rose from 184 in 1916–17 to 384 in 1921–22. The number of oriental colleges similarly rose from 7 to 12. During the quinquennium, arrangements were made for imparting instruction to students preparing for the M.L. examination in the Madras Law College. The College of Engineering was removed to the new residential buildings at Guindy. A teachers' training college was opened at Rajahmundry and an L.T. class was also attached to the Queen Mary's College for Women, Madras, to train women teachers.

University

Arts colleges

Colleges for professional training

Secondary education

613. The total number of Indian secondary schools for boys rose from 345 in 1916–17 to 478 in 1921–22 and their strength from 136,141 to 150,839. The increase in the number of secondary schools was chiefly due to the opening of a large number of schools by local boards with the help of provincial subsidies. The number of pupils appearing for the secondary school-leaving certificate examination has been increasing and the total number of students examined during the year was 10,663. The direct expenditure on Indian secondary schools rose from Rs. 38 lakhs in 1916–17 to Rs. 60 lakhs in 1921–22. To this increase local board schools and aided schools have contributed Rs. 9 lakhs and Rs. 10 lakhs, respectively. The average cost of educating each pupil was Rs. 36·9 and the average fee paid was Rs. 21·7.

Elementary education

614. The total number of public elementary schools for boys rose from 28,867 in 1916–17 to 33,624 in 1921–22 and their strength from 1,231,198 to 1,371,779. The number of institutions under public management has markedly increased during the quinquennium. There was also a large increase in aided schools with a simultaneous decline in unaided

schools. The percentage of schools under mission management (aided and unaided) rose from 22 to 26. Out of 58,286 teachers employed in elementary schools for boys, 22,793 were certificated, the corresponding figures for 1916–17 being 49,060 and 16,631, respectively. Night schools rose in number from 707 to 2,456 and the strength in them from 17,606 to 58,233. The total expenditure on elementary schools for boys rose from Rs. 58·32 lakhs in 1916–17 to Rs. 87·02 lakhs in 1921–22, towards which public funds contributed Rs. 65·65 lakhs or 75 per cent, fees Rs. 7·89 lakhs or 9 per cent and other sources Rs. 13·48 lakhs or 16 per cent, the corresponding percentages for the previous quinquennium being 72, 13 and 15, respectively. The average cost per pupil was Rs. 6–7–0; each pupil in Government schools cost Rs. 11–4–0, in board schools Rs. 9–7–0, and in aided schools Rs. 4–13–0. Fees met 1·1 per cent of the expenditure in Government schools, 3·5 per cent in board schools and 14 per cent in aided schools.

Special education

615. There were 265 special schools during the year against 206 in the preceding quinquennium. Of these, 161 were training schools for masters and mistresses and the rest were technical, medical, industrial or art schools. The number of training schools for Indian mistresses was 30 with a strength of 1,547 students. During the year 57 sessional schools were at work. There were 61 technical schools in 1921–22 with 4,149 pupils. The most popular courses were civil engineering, drawing and commerce. The number of recognized industrial schools rose from 40 with 1,970 pupils in 1916–17 to 43 with 2,311 in 1921–22.

Female education

616. The number of girls in Indian schools (public and private) rose by 55,241 to 376,781 in the quinquennium, an increase of 17·2 per cent. The percentage of female scholars to the female population was 1·8 against 1·5 in the last quinquennium. There are at present four colleges for women with 335 students, the St. Ann's High School, Mangalore, having been recently raised to the collegiate grade. The total number of women students in arts colleges for men and women was 384 against 184 in 1916–17. The number of Indian secondary schools for girls rose from 39 to 57 and the number of girls reading in secondary schools rose from 8,121 to 12,358 during the quinquennium. The municipal and board elementary schools contributed mainly towards the total increase of 948 in the case of public elementary schools for girls. The percentage of certificated teachers to the total number of teachers in public elementary schools for girls was 62 against 56 in 1916–17. The expenditure on secondary and elementary schools for girls rose from Rs. 13 lakhs in 1916–17 to Rs. 24·39 lakhs in 1921–22, towards which public funds contributed Rs. 16·96 lakhs or 69 per cent, fees Rs. 1·40 lakhs or 6 per cent and other sources Rs. 6·03 lakhs or 25 per cent, the corresponding percentages for 1916–17 being 62, 6 and 32.

European education

617. The total number of schools for Europeans and Anglo-Indians, including the industrial school under the control of the Director of Industries, rose by one to 91 and the total strength increased by 1,223 to 9,638. The Secretary of State for India sanctioned the provincialization of the Lawrence Memorial School, Ootacamund. Out of 711 teachers, 499 were fully qualified and 76 had no certificate of any kind. The total expenditure on European schools rose from Rs. 14·55 lakhs in 1916–17 to Rs. 23·16 lakhs in 1921–22, towards which public funds contributed 35 per cent, fees 17 per cent and other sources 48 per cent, the corresponding percentages for the last quinquennium being 41, 18 and 41.

Education of Muhammadans

618. Although the number of Muhammadan schools increased during the quinquennium from 2,668 to 2,918 or by 9·4 per cent, the increase in their strength was insignificant. The Islamiah Secondary School, Vāniyambādi, was raised to the status of a second-grade college. The number of Muhammadan scholars in secondary schools rose from 7,088 to 7,823, while the number in the arts colleges fell from 182 to 141. The number of Government schools for Muhammadans rose from 66 in 1916–17 to 78 in 1921–22, the municipal and board schools from 846 to 1,095 and

aided schools from 603 to 820. The number and strength of private schools have declined during the past five years. At present there are 13 secondary schools as compared with 6 in 1916–17. There was a slight improvement during the quinquennium both in the number and strength of schools intended for Māppillas. The expenditure on Muhammadan and Māppilla schools rose from Rs. 8·20 lakhs to Rs. 11·76 lakhs in 1921–22, towards which public funds contributed Rs. 9·71 lakhs or 83 per cent and fees Rs. 0·45 lakh or 4 per cent.

Education of Ādi-Drāvidas and Ādi-Āndhras

619. The number of institutions primarily intended for Ādi-Drāvidas rose, during the quinquennium, from 5,691 to 8,035 and their strength from 158,593 to 219,068. The total number of pupils in all classes of institutions rose from 120,607 in 1916–17 to 157,113 in 1921–22, the number reading in secondary schools alone being 1,217 against 718 in the previous quinquennium. There were also six Ādi-Drāvida students reading in arts and professional colleges. The expenditure on Ādi-Drāvida and Ādi-Āndhra schools rose from Rs. 8·74 lakhs in 1916–17 to Rs. 12·96 lakhs in 1921–22, towards which public funds contributed Rs. 7·66 lakhs, fees Rs. 0·29 lakh and other sources Rs. 5·01 lakhs.

Aboriginal, hill and criminal tribes

620. There were, in 1921–22, 515 schools in the Presidency for the boys of aboriginal, hill and criminal tribes with 19,116 pupils under instruction. The total expenditure on these schools rose from Rs. 0·59 lakh in 1916–17 to Rs. 1·12 lakhs in 1921–22, of which provincial funds contributed Rs. 0·83 lakh, local funds Rs. 0·07 lakh and other sources Rs. 0·21 lakh.

Schools for the blind and for the deaf-mutes

621. There are four schools for the deaf and dumb, situated at Guntūr, Madras, Madura and Palamcottah, and their strength is 94 boys and 87 girls. There are also two schools for the blind, one at Rentachintala and the other at Palamcottah, with a total strength of 94 boys and 61 girls.

Private institutions

622. During the quinquennium, the number of private institutions fell from 4,679 with a strength of 126,961 to 3,443 with a strength of 94,529 pupils. Of these, 84 were recognized Sanskrit schools receiving provincial grants-in-aid.

Hostels

623. There were 383 hostels for boys and 154 for girls in 1921–22 with a total of 29,191 boarders. As usual, the majority of these resident students were Indian Christians.

Finance

624. The total expenditure of the year rose from Rs. 319·09 lakhs to Rs. 339·98 lakhs, of which Rs. 245·12 lakhs represented direct expenditure. Of the total expenditure, public funds contributed 57·73 per cent, fees 21·52 per cent and other sources 20·75 per cent, the percentages showing little variation from those of last year. Arts colleges claimed 5·62 per cent, professional colleges 2·37 per cent, general schools 53·38 per cent, special schools 10·73 per cent and general or indirect charges 27·90 per cent of the total expenditure. Including the figures of the professional colleges and special schools under the control of other departments, provincial receipts and charges aggregated Rs. 8·19 lakhs and Rs. 170·12 lakhs, respectively, against Rs. 4·09 lakhs and Rs. 98·31 lakhs, respectively, in the previous quinquennium. Of the total expenditure under the various heads of education, the percentages met from public and private funds were 57·05 and 42·95, respectively. The average cost of general education in public institutions for Indian boys under the three heads, Government, board and aided schools was, for arts colleges Rs. 275, Rs. 236 and Rs. 189 ; for secondary schools Rs. 56, Rs. 43 and Rs. 36 ; and for elementary schools Rs. 11, Rs. 9 and Rs. 5, respectively. The total annual expenditure on education rose, during the quinquennium, from Rs. 216·88 lakhs to Rs. 339·98 lakhs or by 56 per cent. It may be observed that, while the expenditure from public funds showed an increase of 72 per cent, fees and the amount contributed from private funds and other sources rose only by 25 per cent and 59 per cent, respectively. Thus the share of expenditure borne by public funds is increasing, while that borne by private funds is decreasing. The total direct expenditure has increased by 58 per cent in the quinquennium, while the indirect expenditure has risen by 50 per cent.

REFORMATORY SCHOOL, CHINGLEPUT (1921)

[*Statistics of British India, Vol. IV, Administrative, Judicial, etc.—Jails*]

625. The strength of the Reformatory School, Chingleput, on the 31st December 1921, was 250 as against 245 in the previous year. The number of admissions increased from 53 to 61. Of these 39 were first offenders, 17 had one previous conviction and 5 two previous convictions. Twenty-five boys were discharged after their full periods of detention, and 28 were specially discharged on account of over-age or disease. Two boys who were re-convicted for escaping from the school were sent to the Borstal Institution, Tanjore, and one died in the Government Hospital. There was only one attempt at escape, but the boy did not succeed even in getting out of the premises. The sanitation of the premises and surroundings was carefully attended to. Anti-malarial measures were as usual carried out. The total number of in-patients in the hospital was only 69 as against 194 in the previous year. The monitorial system continued to work satisfactorily. The number of punishments decreased again from 42 to 10. The total earnings of the boys were Rs. 1,070 which was slightly less than the figure for the previous year. The religious and moral tone of the boys continued to receive special attention during the year. Nineteen boys appeared for the elementary school-leaving certificate examination; of these, seventeen won "good" certificates and the remaining two "fair" certificates. For the Government technical examinations 20 candidates in all appeared and 17 passed. Football, hockey and cricket were played by the boys and in the District Athletic Sports the "Mayhew Shield," which was won by the school for the third time, became the permanent property of the school. Fifty-two additions were made to the library during the year and the place was kept open for use during the holidays also. Deducting the sale-proceeds, the net expenditure was Rs. 0·51 lakh as against Rs. 0·54 lakh in the previous year. Reports received in respect of 199 ex-pupils showed that 130 or 65 per cent bore a good character and that two were prosecuting higher studies.

MISCELLANEOUS (1921–22)

Government examinations

626. The normal number of examinations held by the Commissioner for Government Examinations was increased by the addition of the Sub-Assistant Inspectors' and Supervisors' tests. In addition, arrangements were made for the holding of the Indian (Imperial) Police Examination in Madras, at the instance of the Director of Public Instruction and by arrangement with the Inspector-General of Police. The examinations were held at centres within the Presidency and in some cases outside of it. For the Sub-Assistant Inspectors' test examination 154 candidates including seven women registered their names; 89 including five women appeared, and 39 of the male candidates and four of the women candidates were successful. For the Supervisor's test examination the numbers of candidates registered, examined and passed were 85, 47 and 43, respectively. There were 13 candidates from three schools for the test in teaching the deaf, six of whom were women; of these, nine candidates including four women qualified for certificates. For the technical examinations there were 12,077 individual and 13,828 subject candidates against 10,962 individual and 12,133 subject candidates in the previous year. The results were better than those of 1920–21 in the case of the Intermediate grade. The subject candidates included five women for the Advanced grade, 208 for the Intermediate grade and 513 for the Elementary grade, of whom two, 170 and 341, respectively, were successful. One of the women candidates for the Intermediate grade passed in modelling. Ten diplomas, which included three for chemists and druggists, and 131 group certificates, of which three were for Mechanical Drawing, were issued during the year.

Two of the male candidates qualified for the Hutton silver medals for minor sanitary engineering. No candidate appeared for the elementary examination in music and the silver medal of the Madras Musical Association was therefore not awarded. The Committee appointed to revise the scheme of the technical examinations met during the year and formed themselves into Sub-Committees to deal with the various subjects. For the special test examinations, 2,794 candidates registered their names, of whom 2,142 appeared and 1,220 were successful against 3,057, 2,364 and 1,267, respectively, in the previous year. The results in the Revenue test were better than those of the previous year. The results were generally good and the percentage of success on the whole rose from 53·59 to 56·96. For the secondary school-leaving certificate public examination which was held at 223 centres, 12,387 pupils from 248 institutions and 328 private candidates registered their names. The number examined was 11,446 including 299 private candidates, and of these 11,364 completed their certificates. For the special examination under the secondary school-leaving certificate board for the benefit of teachers who had failed in the matriculation or the upper secondary examination and who wished to be admitted for secondary grade training and the women's secondary grade final examination, 25 and 27 candidates, respectively, registered their names and all the former and 26 of the latter underwent examination. In connexion with the public examination at the end of the advanced course of studies in Sanskrit schools and the examination for technical teachers' certificates in drill and gymnastics 142 and 132 candidates, respectively, registered their names and 125 of the former and 126 of the latter appeared. Of the former 33 were declared eligible for admission to the University courses of study for the Siromani title, 7 for admission to that for the Vidvan title and 34 for admission to either course; and of the latter 111 were successful. The number of candidates who registered their names for the training school-leaving certificate examination which was held at 96 centres, was 7,001 (as against 5,203 in the previous year) of whom 6,710 appeared, 666 for the secondary grade and 2,442 and 3,602, respectively, for the elementary higher and lower grades. The number of successful candidates was 4,102, of whom 520, 1,493 and 2,089 were in the three grades, respectively. In the case of the technical teachers' certificate examinations the number of candidates registered, examined and passed was 107, 101 and 69, respectively.

627. In connexion with the European school and scholarship examinations 193 candidates registered their names for the higher and 312 for the middle grade; 189 of the former and 306 of the latter appeared. In the higher grade 106 candidates (including 53 women) and in the middle grade 117 (including 59 women) were successful.

628. The receipts rose from Rs. 2·30 lakhs to Rs. 2·37 lakhs and the expenditure from Rs. 1·96 lakhs to Rs. 2·18 lakhs. Finance

Lawrence Memorial School (1921-22)

629. At the end of the financial year 1921-22 there were 298 boys and 165 girls on the rolls of the school. Of these, 16 boys and 16 girls were day-scholars. There were 252 children on the waiting list, of whom 65 are orphans; 210 of these are the children of British officers or men who are serving or had served in India. At the Government examinations held in 1921, five boys and four girls passed the High School examination and six boys and two girls passed the Middle School examination; the school had the distinction of winning the first place in the first class in the High School examination. An innovation is the preparation of certain girls for the Cambridge Local examinations. Technical education in telegraphy, music, typewriting and drawing showed satisfactory progress, and the various gentlemen who visited or inspected the school expressed their appreciation of the work done. The total receipts for the financial year, including the closing balance of the previous year, amounted to Rs. 3·34 lakhs, and the expenditure to Rs. 3·28 lakhs. The closing balance fell from Rs. 0·24 lakh to Rs. 0·06 lakh. Finance

LITERATURE AND THE PRESS (1921-22)

[*Statistics of British India, Vol. IV, Administrative, etc.—Press and Publications*]

Public libraries

Connemara Public Library

630. The number of visitors to the Connemara Public Library rose, by 2,411, to 23,118, the total number of volumes consulted being 39,256 as against 50,229 in the previous year. This decrease was due to the greater facilities offered by the University Library and to the introduction of the practice of allowing responsible persons direct access to the shelves ; no note can be kept of the number of such references. During the year 698 standard works comprising 826 volumes were added to the library. Of these 204 (221 volumes) were purchased and 494 (605 volumes) were received as gifts, including a collection of 586 volumes presented by Mr. P. Soutter, A.M.I.C.E., of Bangalore. This collection is probably the most valuable gift by a private individual to the library since its foundation. The sixth supplement of the Author catalogue was brought out during the year and a card catalogue for all subsequent additions was compiled. Preliminary measures were undertaken for organizing a library circle for the Presidency with a system of inter-borrowing, but the scheme was held in abeyance owing to financial stress. The provision of additional shelves for the storage of books was also postponed for the same reason. At the University Library the total number of readers was 11,552 as against 12,481 in 1920–21, the number of volumes consulted being 24,044 as against 27,520 in the previous year. The number of persons who took books on loan from the library fell, by 13, to 235, but the number of volumes taken out rose from 5,554 to 5,882. The number of manuscripts acquired for the Oriental Manuscripts Library was 1,141 as against 670 of the previous year. Of these 278 were purchased, 484 were presented, 378 were acquired by transcription and one was acquired by restoration. The publication section of the library published the rare Sanskrit work " Padyachūdāmani." Three other rare works have already been taken in hand and are being got ready for publication. The temporary search party organized in 1914 for acquiring manuscripts from private hands continued its work in three different sections as usual —one in the Telugu districts, another in the Tamil districts and a third in Malabar, but owing to financial stringency the party had to be disbanded in March 1922. The library continued to be popular and useful. The number of visitors rose from 2,035 to 2,437 though the number of books consulted by them fell from 4,667 to 4,499. Many manuscripts were lent out.

University Library

Oriental Manuscripts Library

The Madras Record Office (1921-22)

631. The only additions to the Madras Record Office during the year were records from the Secretariat, which are transferred annually under Standing Orders. The publications issued during the year were (1) Records of Fort St. George consisting of (*a*) Public consultations, 1696, 1697 and 1698, (*b*) Letters from Fort St. George, 1693–94, 1694 and 1696 and (*c*) Letters to Fort St. George, 1699–1700, (2) a volume on balances relating to the Baramahal Records, and (3) the Index to the Revenue consultations for 1830. Volume VIII of the Diary of Ananda Ranga Pillai is almost ready for issue and Volume IX is in the Press as also the volume on the Police relating to the Baramahal Records. The matter for a third volume of the Calendar of the Madras Despatches, 1755–1764, is nearly ready and has to be completed by the inclusion of the calendars of missing despatches transcripts of which have been received from the India Office. The mending of records on the model adopted at the Imperial Record Office, Calcutta, was continued and 2,827 documents of the 18th century and 2,473 of the 19th century were dealt with during the year. The old records of the Bond and Agency Departments of the Accountant-General's Office which were sent to the Record Office for examination were scrutinized and a report submitted to the Government. The question of their disposal is under consideration.

632. Two hundred and fifty-four newspapers were in existence at the end of 1921 as against 240 at the close of the previous year. Sixty-nine newspapers were started during the year and 56 ceased to exist. Among the papers published in English, the *Hindu*, a vehement opponent of the Government, the *Madras Mail* and the *Daily Express*, both of which latter are papers with a wide circulation among the European and Anglo-Indian communities, showed the largest circulation. Of the vernacular papers the Tamil *Ananda Bodhini* and *Swadesamitran*, the Telugu *Hitakarini*, a strong supporter of non-co-operation, the *Praramba Vidya* and the *Andhrapatrika*, the Malayalam *Malayala Manorama* and the Kanarese *Vrittanta Patrike* were the only journals with an appreciable circulation. Of these, the *Hindu* and the *Madras Mail* showed a greatly increased circulation. There was little or no change in the tone of the Press during the year. Discussion centred mainly round the non-co-operation movement and the methods—styled variously "disciplinary" or "repressive" according to the opinions of the journal—employed by the Government to preserve the peace of the Presidency. All the papers were stout champions of law and order, until the forces of law and order came into action, when enthusiasm in many cases gave way to criticism. Demands for security led to the closing of five printing presses, the failure of three attempts to start journals and of one attempt to open a press and the discontinuation of one weekly. Four prosecutions were launched under the Press and Registration of Books Act; three of these cases were concluded, two persons being fined and one acquitted. The virulence of a section of the Press is evidenced by the fact that, in spite of the desire of the authorities to respect the liberty of the Press, the number of publications which it was found necessary to declare to be forfeited under the Press Act rose from 29 in 1920 to 71 in 1921.

Periodicals (1921)

633. The period of the war and the years immediately following it had witnessed a distinct decrease in the literary output of the Presidency; public attention was focussed on less peaceful activities, and the supply of paper was greatly restricted. But the year under review saw a general increase in literary effort. The number of books rose from 2,393 to 2,973 and the number of periodicals from 664 to 665. The increase was noticeable in the case both of publications in English and other European languages (from 703 to 877) and of vernacular publications (from 2,019 to 2,398). Tamil, Telugu and Malayālam publications increased in number from 999, 720 and 97 to 1,230, 853 and 114, respectively. As usual, books of a religious nature headed the list with a total of 1,180. Of the districts, Madras was far ahead of the rest with 1,586, Kistna coming second with 332, while Anantapur occupied the last place with one publication.

Registration of books (1921-22)

LITERARY SOCIETIES

General

634. Excluding sectarian institutions and associations such as missionary, theosophical, and Brahmo Samaj societies which are mainly intended to advance the interests of particular religions or of particular classes of individuals, there were on the returns of the Educational Department for last year 2,312 scientific and literary societies, reading rooms and teachers' associations. The total number of members or visitors connected with these societies included 304,238 males and 3,072 females. The gross income during the year amounted to Rs. 1,71,751, of which Rs. 11,343 were met from public funds, Rs. 28,007 from endowments and Rs. 1,32,401 from donations and subscriptions.

Government Oriental Manuscripts Library

Para. 630

History

635. Three collections of manuscripts, (1) the vernacular manuscripts and the local tracts and copies of inscriptions belonging to the Mackenzie collection, (2) the East Indian House collection and (3) the manuscripts collected by the Telugu scholar Mr. C. P. Brown which were all in an outhouse attached to the Old College, Nungambaukam, under the care of the Director of Public Instruction, formed the nucleus of what is now the Government Oriental Manuscripts Library. They were transferred in 1869 to the charge of Mr. Pickford, then Professor of Sanskrit in the Presidency College, who was directed to look after the manuscripts and to prepare a catalogue of them to facilitate their identification and their accessibility to the public. The Professor of Sanskrit thus became the librarian of this institution. In 1875 he became the curator of the library and was given an allowance of Rs. 100 per mensem. He was then called upon to prepare for publication important literary and historical manuscripts ; and in 1876, in accordance with the orders of the Government of India, he was required to discover new manuscripts in the Presidency and to purchase them or acquire them by transcription. In pursuance of these orders many manuscripts have been acquired and the total collection is now classified as follows :—

The Collection

Sanskrit	19,989
Telugu	4,006
Tamil	3,110
Kanarese	1,141
Malayālam	276
Marathi	368
Oriya	137
Arabic	176
Persian	620
Hindōstani	67
Miscellaneous	198
Local tracts	3,829
Total	33,917

Publications

The following publications have also been issued in execution of these orders:—

(1) List of manuscripts in the private libraries of Southern India, Volumes I and II, with an index containing the names of about 19,000 manuscripts.
(2) Index of the 62 volumes of local records.
(3) Sukranītisāra.
(4) Report on the search for Sanskrit and Tamil Manuscripts for the years 1896–1897 and 1893–1894, two volumes.
(5) Alphabetical index of manuscripts in the Government Oriental Manuscripts Library, Madras.

Tours

636. Tours in search of manuscripts were also made between the years 1883 and 1886, and 58,000 manuscripts belonging to private libraries were catalogued. In the year 1886, the duty of searching for manuscripts, which carried an annual grant of Rs. 3,000, was transferred to the Government Epigraphist and an annual grant of Rs. 600 was sanctioned

to the library for acquiring and transcribing manuscripts and for preserving them. Up to 1914, the permanent staff of the library went out on tour and acquired manuscripts. Afterwards a peripatetic party was organized and it worked in three sections and acquired 7,366 manuscripts ; the party was disbanded in March 1922, on account of financial stringency. A descriptive catalogue of the Sanskrit manuscripts has been published in 24 volumes (with a supplemental volume) containing a description of 8,518 works in 9,490 pages. The supplemental volume describes 455 works and covers 238 pages. Two volumes of the Tamil descriptive catalogue have been published. Volume III containing 421 pages is almost ready for issue. Two volumes of the Telugu descriptive catalogue, describing 795 works, have also been issued. In 1922, the annual grant was raised to nearly Rs. 8,000, thus making larger amounts available for the acquisition, transcription and preservation of manuscripts. A portion of the grant was also set apart for the purchase of printed books of reference and for preparing manuscripts of rare works for publication. Thus in addition to the routine work of the library, the curator was able to bring about the publication of the Sarvasiddhāntasangraha of Sankarachārya (with English translation), a rare work on the various philosophical systems of India. Ganitasārasangraha of Mahāvirachārya, a rare mathematical work of historical importance, has also been printed and published with an English translation and notes. Padyachūdāmani, a hitherto unknown work of Buddha Gosha describing the life of Buddha, has also been published. A separate publication section has been formed for a period of two years and it has taken up the publication of rare and important works. Three works are being made ready for publication by this section. The average annual number of visitors who consulted the library between 1912 and 1922, has been 1,941 and in 1921-22 4,499 manuscripts were consulted by them. Arrangements are made to supply copies of manuscripts to scholars at their own expense. Government have also issued orders for the lending of manuscripts to responsible persons on certain conditions.

637. The library was removed from the Old College to the Presidency College in 1870, thence to the Secretariat buildings in the Fort in 1890 and lastly, in 1896, to the Museum buildings where it is now located. This building has been found unsuitable and cramped ; and a proposal to provide a more suitable building for the library is under consideration. The curator's monthly allowance of Rs. 100 was discontinued after the retirement of Dr. Oppert in 1893. As the staff of the library was found to be inadequate to cope with the expanding work, it was re-organized in 1910 and the number of members was increased from three to nine. The superior staff of the library is at present composed of the curator, the librarian, the assistant librarian, and two pandits. The Library

638. The policy governing the management of the Government Museum during the last three decades has been to render it a popular index or illustrated guide to the natural history (animal, vegetable and mineral), arts, archæology, ethnology and economic resources of Southern India. That it is popular is shown by the fact that it is visited by about 400,000 persons annually. The museum buildings consist of two sections, the old and new buildings, of which the latter, with the connected Connemara Public Library, was opened to the public in 1896. The new building also includes a theatre capable of holding more than 400 people with a stage adapted for the purposes of lectures, conferences and entertainments. Government Museum *Para. 645*

639. The old building is devoted to the natural history, archæological and economic sections. Very much appreciated is a small vivarium, wherein are exhibited series of snakes, smaller mammals, and birds with photographs, pictures and specimens illustrating their life history. The most conspicuous exhibits in the animal section are the skeleton of the great Indian whale which was washed ashore near Mangalore and measures 48 feet in length and the skeleton of a solitary male elephant

which was shot in South Arcot and stands about 10′ 6″ at the shoulder. In the archæological gallery are set up the beautiful sculptured marbles from the railing of the Buddhist stupa at Amarāvati in the Guntūr district, which dates back to the latter end of the second century A.D.; and a valuable relic is a fragment of bone contained within a rock-crystal casket from Bhattiprolu, also in the Guntūr district, which was enclosed in an outer stone casket inscribed with a legend stating that it was made in order to deposit therein some relics of Buddha. The relic probably dates back to 200 B.C. or earlier. In addition to several galleries devoted to the illustration of the fine and industrial arts and ethnology of Southern India, the new building contains the fine historic collection of arms and armour which was formerly deposited in the arsenal at Fort St. George and the splendid series of arms from the old Tanjore Palace armoury; a valuable collection of pre-historic and proto-historic antiquities including the Breeks' collection of pottery from the cairns and barrows of the Nilgiri hills; the collection of bronze, iron weapons and implements, pottery and human bones excavated at Aditanallur in the Tinnevelly district; and the collection acquired by purchase of paleolithic and neolithic celts, hammers, mealing stones, scrapers, coins, bangles, beds and other articles collected by Mr. R. Bruce-Foote. There is also a large numismatic collection which is specially rich in coins of the various native dynasties of Southern India and of the various European companies—English, Dutch, French, Portuguese and Danish.

Marine Aquarium

640. The marine aquarium on the Madras Marina, the first institution of its kind in India, was opened to the public in 1909. It continues to maintain its claim to be among the most popular resorts in Madras; and the extra expenditure authorized by Government for the purpose of adding to its attractiveness has been justified by a maintenance of the phenomenal increase in attendance and gate money, more than 15,000 persons visiting it annually.

Connemara Public Library

Para. 630

641. The Connemara Public Library contains about 25,700 standard works in addition to a large series of Government publications, periodicals, journals of societies, calendars of state papers, etc.; it was used by 23,000 readers in 1922.

642. The museum, the library and the aquarium are open to the public every day except on Fridays. The cost of the upkeep of the museum and library in 1921–22 was Rs. 50,857 and, that of the aquarium Rs. 4,993 for 1920–21.

Literary Societies

643. There are in the Presidency 2,312 societies which may be classed as literary. The most important of them are: the Madras Literary Society and Auxiliary of the Royal Asiatic Society, the Madras Progressive Union, the Muhammadan Public Library, the Madras Teachers' Guild, the Victoria Edward Hall, Madura, a large literary society, and the Vanniakula Kshatriya Mahasangam, Madras, the object of which is the education of children of the Vannia caste.

644. Most of the other societies are either teachers' associations or mufassal reading-rooms. These institutions, although of very great cumulative utility, are individually small and need not be particularized here, as publications like the Lawrence Asylum Press Almanack contain information about many of them.

ARTS AND SCIENCES (1921–22)

Government Museum

645. The Museum is now a member of the Museums Association of Great Britain. The number of visitors increased by 18,577 to 606,284. Excluding two Hindu festival days which generally attract a large number of visitors, the average attendance was 226,825 as against 242,447 last year. Improvements to the south wing of the old building consequent on the extensions to the Natural History section were effected and this has afforded more wall space for exhibiting specimens. During the greater part of the year the fish room was closed to the public, partly for repairs and partly to allow the staff freedom for effecting certain necessary changes in the arrangement of specimens. The Museum Theatre was much improved by the provision of fans and comfortable seats and by the widening of the proscenium. The theatre was very much in demand and was used on 22 occasions (excluding rehearsals) during the year. The Superintendent with the Zoological Assistant visited Bangalore and secured a valuable collection of invertebrate specimens. From there he went to the Nilgiri Hills and collected a number of interesting botanical specimens. Demonstrations to the teachers and pupils in Madras schools were conducted as usual. The entire collection of bronzes was scrutinized and the best specimens were selected for exhibition, duplicates being presented to the Indian Museum, Calcutta, the School of Arts, Madras, and the Prince of Wales Museum, Bombay. Valuable additions were made to the collection of coins and copper-plate grants relating to South India, one of the most interesting being a number of 7th Century Chinese coins found in the Chingleput district. A catalogue of the coins of Haidar Alī and Tippu Sultān was published. The herbarium containing typical specimens of the flora of Madras City and its surroundings which was started last year is progressing satisfactorily, and it was freely used by teachers and school boys. The reserve collection of zoological specimens was considerably increased and gramophone records of the principal languages and dialects of the Presidency were made.

Meteorology (1921–22)

646. The only observatories under the control of the Meteorologist, Madras, were Anantapur, Guntūr, Koraput and Vellore. Of these, Vellore is a third-class observatory where readings are taken at 8 a.m.; Anantapur, Guntūr and Koraput are fourth-class observatories where observations of temperature and rainfall only are recorded. The chief work of the Madras Meteorological office was as usual the publication of the Madras Daily Weather Report and of the Presidency Rainfall Tables. The Madras Daily Weather Report was issued to 54 Government and other officials in Madras, to 104 in the mufassal and to 17 private subscribers. A sum of Rs. 187-8-0 was collected during the year and credited to Government. Excluding Meteorological observations, there were on the 31st March 1921 492 rain recording stations furnishing rainfall reports for publication in the *Fort St. George Gazette*. Of these 394 were in the Madras Presidency and 361 or 91·6 per cent of them were inspected. The stations in the Agency tracts of Ganjām, Vizagapatam and Gōdāvari were constituted into a separate division (the Agency Division) and placed in charge of the Agency Commissioner. The total expenditure of the Madras Meteorological office during the year was Rs. 11,716–3–8 as against Rs. 11,187–5–11 in the preceding year.

Astronomy (1921) Kodaikānal Observatory

647. At Kodaikānal the record of solar activity was maintained as in former years. Spectroheliograms of the sun's disc in calcium light were obtained on 335 days and of prominences on 279 days. Photographs of the disc in hydrogen light were secured on 285 days and direct solar photographs on a scale of 8 inches to the sun's diameter on 339 days. Compared with the previous year there was a decrease in sunspot activity amounting to about 20 per cent in the case of new groups, the decrease being slightly more marked in the northern hemisphere. The visible disc was free from spots on 47 days during the year. The approximate mean latitude of the spots observed was 9·8° in the northern and 10·3° in the southern hemisphere. The prominence records showed a slight decrease

of activity compared with the previous year and the distribution in latitude was somewhat different. The large grating spectrograph was employed in photographing solar and arc spectra. In addition to this an autocollimating prism spectrograph of 8 feet focal length was constructed at the end of the year and with this 13 excellent spectra of Venus were obtained in November and December. Measures of the sun and arc plates indicated a systematic difference between the displacements of the solar lines in the north and the south limbs, thus confirming the result previously found in this observatory. A continuous registration of earthquakes was made with a Milne Seismograph and 105 earthquakes of all intensity were recorded during the year. Continuous photographic records of the magnetic elements and absolute eye observations were continued as in former years. Sixteen "Great" and 85 "Moderate" magnetic storms were registered during the year. The "Great" storm of May 13–22, associated with the meridian passage of a large sunspot situated on the equator, was of greater intensity and longer duration than any previously recorded and caused considerable disturbance to the Indian Telegraph Service on May 14 and 15.

Madras Observatory

At Madras the only astronomical observations made were those for the maintenance of an accurate time service for the whole of India. The time gun at Fort St. George failed on 14 occasions out of 731, giving a percentage of success of 98·0 as against 96·3 in the previous year. Most of the failures were due either to faults in the firing instrument at the Fort or to mistakes in the line. The gun was fired at 8 hours and 11 hours instead of 12 hours on November 11, on account of the anniversary of the Armistice. The time ball at the harbour failed at 13 hours on one day but dropped correctly at 14 hours. The 16-hour roll of signals was sent as usual on every day. The 7 p.m. radio signals were received occasionally for a few days till the end of September when they ceased to arrive except on very rare occasions. The arrangement of receiving the signals over the telephone is unsatisfactory and arrangements are being made to supply this Observatory with a simple wireless receiving set. It is hoped that after the installation of this set, signals will be received satisfactorily so as to enable comparisons between Calcutta and Madras clocks to be made accurately.

CHAPTER VIII

ARCHÆOLOGY AND EPIGRAPHY (1921-22)

[*Annual Report of the Archæological Department, Southern Circle, Madras, for the year 1921-22; Annual Report of the Assistant Archæological Superintendent for Epigraphy, Southern Circle, for the year 1921-22*]

Archæology

648. During the year the office of the Superintendent was transferred from Madras to Kotagiri. A good deal of the Superintendent's time was taken up in establishing his office at Kotagiri and therefore no research work was undertaken this year. The first part of the special work on Pallava Architecture was completed by the Superintendent and was sent on for publication to the Director-General of Archæology in India. The work of conservation of ancient monuments received careful attention and out of a total allotment of Rs. 53,000 a sum of Rs. 28,574 (excluding centage charges) was spent on it during the year. This expenditure was incurred on one hundred and fifteen different items, including ordinary annual repairs. The Armoury at Bandar Fort, Masulipatam, the Rock-cut Temples on the Indrakila Hill, the Hill Fort at Kondapalle and the Buddhist Remains at Guntapalle, were repaired. The work of conserving the Buddhist Stupa at Amaravati was completed. The gopuram of the Ramaswami temple at Tadpatri, the fort and its buildings at the foot of the hill at Gooty, the Siva temple at Kalyandrug and Sir Thomas Munro's house were conserved. Considerable improvements to the roads at Hampi Ruins were made. Special repairs were carried out at the Kabir Mosque, the Fort at Wandiwash and the Gingee Fort. The approaches to the monuments at the Seven Pagodas were also improved. The conservation of the Roman Catholic Portuguese Church at Porto Novo which stood in urgent need of repairs and improvements was taken up, with the approval of the Director-General of Archæology in India, and considerable progress has already been made. The Dindigul Fort, the Rock-cut carvings at Tandoni, the Yaktyar Masjid and Cuddapah Nawab's tomb, Shamas Khan's Mosque, the Ranjangudi and Anjengo forts and the Dutch cemetery at Tuticorin also received attention during the year. Two hundred and seventy-four new monuments were declared protected under the Ancient Monuments Preservation Act during the year and 120 were deleted from the Standard List as their owners declined to enter into an agreement under the Act. The number of protected monuments at the close of the year was 333. One hundred and four fresh negatives of various subjects were prepared during the year and 67 photographic prints were sold to the public. Ten old pencil drawings were inked and 365 old drawings were scaled. The establishment charges amounted to Rs. 22,814 as against Rs. 21,255 in the previous year.

Epigraphy

649. During the year 338 villages were visited, 808 stone inscriptions copied, ten copper-plate grants examined, and 50 photographs taken. The village-war survey of the Bapatla taluk in the Guntūr district and of the Conjeeveram taluk in the Chingleput district was partly finished and that of Madanapalle taluk was taken up and completed. Transcripts of inscriptions covering 3,327 pages in manuscript were sent to the Superintendent, Government Press, for publication in Volume VII of the *South*

Indian Inscriptions Texts and partly to complete Volume VI for which materials had been sent last year. Of the stone inscriptions collected, 665 were taken up for review in the *Annual Report*, the balance being held over for scrutiny next year. These represent several kings of the Pallava, Eastern Chalūkya, Chōla, Pāndya and Vijayanagara dynasties and some of them throw fresh light on their history. Valuable information could also be gleaned from them regarding the administration and customs of the people, the punishments inflicted for offences, auditing of temple accounts, re-survey and revision of assessments of lands, mode of conduct of village assemblies, political compacts and the like. Of particular interest is the discovery of a stone inscription at Podāgada hill in the Jeypore State, which belongs to the time of the king of the Nalas, a tribe hitherto known only from references in contemporary records. The ill-fated Eastern Chalūkya king Indra-Bhattāraka, whose very rule had to be doubted owing to the exclusion of his name in the genealogical tables of later Eastern Chalūkya grants, is represented by a copper-plate charter which conclusively proves that he did actually rule. Transcripts of the year's collection were made and revised.

CHAPTER IX

MISCELLANEOUS

ECCLESIASTICAL JURISDICTION

General

650. The Government maintain an ecclesiastical establishment. At the head of the Church of England portion of the establishment is the Bishop of Madras and at the head of the Church of Scotland portion, the Presidency Senior Chaplain. The ecclesiastical establishment consists of (*a*) a Bishop, an Archdeacon (who must be a chaplain resident in India and is appointed by the Bishop), 30 Chaplains, and a Registrar, and (*b*) 4 Chaplains of the Church of Scotland. The services of this establishment are extended to non-official Europeans and others resident within the Presidency. The salaries and allowances of the Bishop and the Archdeacon may be fixed and altered by the Secretary of State for India in Council, provided that no additional charge is imposed on the revenues of India. Two Chaplains of the Church of Scotland must be on the establishment. With the sanction of the Secretary of State, the Governor-General in Council may grant to any other denomination of Christians such sums of money as may be expedient for the purpose of instruction or for the maintenance of places of worship. The Government have communications with the Bishop in Travancore and Cochin and make a grant of Rs. 325 per mensem to the Bishop who is responsible for spiritual ministrations to the English congregations at Trivandrum and Quilon. The Government also pay an allowance to the Roman Catholic Archbishop in Madras and pay or subsidize Roman Catholic priests and Wesleyan ministers to minister to the troops in military stations ; they subsidize also missionaries and other clergymen ministering to Europeans in the general service of Government in stations not served by Chaplains. The Government build, furnish and repair churches for the use of soldiers, both Protestant and Roman Catholic, or pay for their sittings, and make grants for non-military churches. Marriages between Christians may be solemnized not only by persons who have received episcopal ordination and by clergymen of the Church of Scotland, but also by ministers of religion licensed for the purpose, by Marriage Registrars and by persons licensed to grant certificates of marriage between Indian Christians ; these licences are issued, and appointments as Registrars are made, by the Local Government so far as regards the territory under their administration, and the Native States situated within or bordering on the Presidency of Fort St. George. Quarterly returns of baptisms, marriages and burials are sent by the clergy through the Registrar-General of Births, Marriages and Deaths to Government. Quarterly returns of baptisms and burials are collected from non-conformist clergymen also and returns of marriages from those who are legally authorized to solemnize them.

43 Vic., c. 3

Act XV of 1872

Act II of 1872

The Church of England

651. The diocese of Madras is coterminous with the Madras Presidency, but the Bishop also exercises jurisdiction over the Native State of Mysore, the British Province of Coorg and a portion of Hyderabad. The arrangement settled in 1866 by which Berar was regarded as ecclesiastically connected with the Madras diocese ceased in 1908, and it was then decided that the Bishop of Nagpur should exercise ecclesiastical control in that territory. In 1911 the Aurangabad division of the Hyderabad State was transferred from the diocese of Madras to that of Bombay. The Nugur, Albaka and Cherla taluks transferred in 1905 from the Central Provinces to the Madras Presidency continue to be under the

The Bishop

3 & 4 Will., c. 85, s. 93, 94 & 96

34 & 35 Vic., c. 62

ecclesiastical jurisdiction of the Bishop of Nagpur. The limits of the diocese may be altered from time to time by His Majesty by Letters Patent. The Bishop is subject to the jurisdiction of the Bishop of Calcutta as Metropolitan. He is appointed by the Crown and is entitled to a pension after holding his office for fifteen years. The Crown is empowered to grant the Bishop within the limits of his diocese the exercise of episcopal functions and of ecclesiastical jurisdiction for the superintendence and good government of the ministers of the Church of England therein. The Bishop exercises jurisdiction over the clergy holding his licence who are stationed within the Native States of Hyderabad and Mysore, and the British Province of Coorg, with the approval of the Governments of India and Madras, since the latter Government appoints Chaplains from the Madras ecclesiastical establishment to serve within those territories ; and in virtue of general episcopal powers conferred upon him by his consecration. Rules may be made by the Crown regarding the absence of the Bishop on furlough or medical certificate, provided that no further expenditure of the revenues of India be incurred thereby than is already authorized under existing Acts of Parliament, and leave may be granted to the Bishop by the Governor in Council in accordance with these rules. The Bishop may perform episcopal functions under commission from a Bishop in England. The Bishop superintends the spiritual work of the diocese ; holds confirmations ; ordains, licenses and exercises jurisdiction over the clergy ; visits all the stations at which clergy are located and many of the out-stations, as a rule, once in three years ; inspects their work in hospitals and schools ; inspects the registers and other church books ; recommends to Government the appointments and transfers of Chaplains ; reports on proposals for new churches, for improvements in churches, or for changes suggested in any ecclesiastical arrangements and consecrates new churches and cemeteries.

Royal Warrants, 4th Nov. 1884, 28th July 1888, 11th Feb. 1901 and 13th Apr. 1920
15 & 16 Vic., c. 52
16 & 17 Vic., c. 49
37 & 38 Vic., c. 77

The Bishop in Tinnevelly and Madura and the Bishop of Dornakal

652. In the superintendence of missions and in the pastoral government of the Indian congregations the Bishop was largely relieved by the appointment on the 28th October 1896, of a Bishop who exercises his episcopal functions by commission in the districts of Tinnevelly and Madura, and by the transfer, by a commission granted by the Bishop of Madras on the 22nd March 1922, of the Indian Christians in the Telugu area comprising the districts of Kurnool, Cuddapah, Kistna and Upper Gōdāvari to the jurisdiction of the Bishop of Dornakal, the first Indian Assistant Bishop to the Bishop of Madras, thus constituting those districts ecclesiastically part of the diocese of Dornakal. It should be noted that the Bishop of Dornakal is neither appointed nor paid by Government and is entirely independent of either Government support or Government control.

The Archdeacon

The Archdeacon attends more particularly to the details of church establishments, church furniture and the maintenance and repair of churches and cemeteries and communicates with Government on these subjects.

59 Geo. 3, c. 60

Chaplains

Persons may be admitted into the orders of deacon or priest to officiate in India by the Archbishop of Canterbury or by the Archbishop of York or by the Bishop of London or by any Bishop specially authorized for the purpose. The Chaplains are divided into three classes, consisting of senior Chaplains, junior Chaplains and Probationers respectively. A Chaplain serves on probation for two years, at the end of which he is, if reported fit by a medical board in India and considered qualified by the Bishop of the diocese, confirmed as a junior Chaplain. Time spent in India on service under the Diocesan Additional Clergy Society or on other service approved by the Bishop and the Government of India may be included in the period of probation and will count for increments of pay up to a maximum of two years. A clergyman must have been three years in orders before his nomination as a probationer. Promotion from the junior class to the senior is attained on the completion of ten years' service in the junior class. As a sequel to the action taken on the report of the Royal Commission on the Public Services in India, the pay of Chaplains was revised on the time-scale system ranging from Rs. 600 in the first year to Rs. 1,300 in the nineteenth year and thereafter, with the proviso

that a Chaplain who on appointment is over 30 years of age will start on the time-scale one year in advance of the minimum for each completed year up to a maximum of five years by which his age on appointment exceeds thirty years. The term of service for a retiring pension is twenty-three years of which twenty years must have been spent in actual residence. Smaller pensions or gratuities are granted on retirement on account of sickness before a full pension has been earned. A Chaplain may be required to retire at the age of fifty-five years provided that he has rendered sufficient service to qualify for a retiring pension. One of the Chaplains is appointed by the Bishop to be his Domestic Chaplain. The others are appointed by Government to the charge of stations, 27 in number ; the five ecclesiastical parishes in Madras and three in Bangalore are treated as separate stations. Every Chaplain at a station in which there are European troops visits the military schools and hospitals under stated rules. Out-stations are attached to several stations ; they are visited periodically by the Chaplain of the station. Besides the Chaplains there are other European and Eurasian clergymen acting under the licence of the Bishop ; some of these are in receipt of allowances from Government. Of the clergy who are neither Chaplains nor missionaries some receive salaries from one or other of the two societies which provide additional clergy in the diocese, the Additional Clergy Society and the Colonial and Continental Church Society, or from local or other private contributions, or from both. Indian clergymen, Tamil and Telugu, constitute a continually growing class. The affairs of the Indian congregations in matters not spiritual, are managed by councils composed of Indian clergy and laity, and by the committee of missionary societies. An important development in the history of Christian missions in South India is the movement for the union of the Church of England with the South India United Church, a federation of presbyterian and congregational churches. This movement began in April 1919 at a conference of Tamil pastors of different denominations at Tranquebar. If this movement ultimately results in union between the Church of England and the South India United Church, the United Church will have a membership of over 600,000 Indian Christians.

Other clergymen

653. The Cathedral of the Madras diocese is the Church of St. George in Madras, which is vested, under a Trust created by the East India Company on the 9th of February 1821, in a body of Trustees who are appointed by the Government of Madras. Two Chaplains are assigned to it. The Bishop appointed in 1902 an honorary chapter of six Canons attached to the Cathedral. These honorary Canons are chosen by the Bishop from among the clergy of the diocese and their titles are recognized by Government as a matter of courtesy. At every station where there is Church property belonging to Government two lay communicants, one of whom should ordinarily be a gazetted officer in the service of Government, are, on the recommendation of the Chaplain and the nomination of the Bishop, appointed by the Government to be Lay Trustees and form, with the Chaplain as president, a church committee. The duties of Lay Trustees are in many respects similar to those of Church Wardens in England. The churches for European congregations are, with rare exceptions, the property of Government and consecrated.

Buildings

Honorary Canons

Lay Trustees

654. On the 31st March 1922 there were 284 clergymen officiating under the licence of the Bishop of Madras. Of these, 45 were officers of the ecclesiastical establishment, that is to say, 30 Chaplains and 15 clergymen receiving allowances from Government, and 5 other European clergymen ministering to English congregations. In addition to these there were in the diocese 27 European missionaries, 189 Indian clergymen and 18 retired clergymen. According to the Census of 1921, the number of European and Eurasian members of the Church of England in the Madras Presidency was 13,566 and the number of Indian members was 170,506.

Establishment

Travancore and Cochin

655. The ecclesiastical supervision of the Church of England in Travancore and Cochin, exercised, with the tacit consent of the Rulers of those States, by the Bishop of Calcutta until 1835 and later by the Bishop of Madras, was transferred in 1880 to a special Bishop who is called the Bishop of the Church of England in Travancore and Cochin and was consecrated in accordance with a Royal Licence issued under the Jerusalem Bishopric Act (5 Vic., c. 6). The number of Indian Christians then transferred from the superintendence of the Bishop of Madras was 16,000 baptized and 2,100 under instruction. The number of Indian Christians belonging to the Church of England in Travancore and Cochin was, according to the Census of 1921, 1,228.

The Church of Scotland

656. The establishment of the Church of Scotland at the close of the year consisted of four Chaplains, of whom one was on combined furlough, while the services of the Church of Scotland Chaplain at Secunderabad had been transferred to the Army Department on his appointment as Chaplain to a Scottish Regiment in that station. The other stations, ministered to by the remaining Chaplains, were Madras and Bangalore. An acting Chaplain was holding services for the Presbyterian soldiers in Wellington. In addition to the Government establishment there were in the Madras Presidency two ordained Church of Scotland Ministers, one of whom is an Honorary Chaplain to the Forces, and acts as Chaplain to the Railway community at Arkonam, receiving a small grant from the Additional Clergy Society, and the other is a Professor in the Madras Christian College. An Indian ordained Minister of the Church of Scotland is in charge of the congregation in Choolai, Madras ; while a retired acting Chaplain, who has worked for many years with Scottish troops in India, has settled at Kodaikānal in the Nilgiri Hills.

The Roman Catholic Church

657. The Roman Catholic establishments of Southern India are to be classed as missionary in the sense that they are not State establishments. Until 1886 there were no Roman Catholic Bishops' sees in the Presidency, but Vicariates Apostolic were created by the Pope, and the Archbishop of Goa was given extraordinary jurisdiction beyond Portuguese territory. The Vicariates were presided over by titular Bishops. The establishment of the hierarchy in India was proclaimed by His Holiness Pope Leo XIII in his Apostolic letter *Humanae Salutis Auctor*, dated 1st September 1886. By this Bull the pre-existing Apostolic Vicariates were constituted episcopal churches and from among the new dioceses Verapoli, Madras and Pondicherry were elevated to the honour of archiepiscopal dignity. The Archbishop of Verapoli has as suffragans the Bishop of Quilon and the Vicars Apostolic of Trichur, Changanacherry, Ernakulam and Kottayam ; the Archbishop of Madras, the Bishops of Nagpur, Vizagapatam and Hyderabad ; and the Archbishop of Pondicherry, the Bishops of Mysore, Coimbatore and Kumbakōnam. The Bishops of Trichinopoly and of Mangalore are suffragans to the Archbishop of Bombay. The Bishops of San Thomē of Mylapore and Cochin are suffragans to the Patriarch of Goa.

658. Pope Leo XIII (1887) separated the churches of the Syrian rite on the Malabar Coast from those of the Latin dioceses, and erected them into two Vicariates Apostolic of Trichur and Kottayam. In 1896 the same Pope granted the Syrian Catholic Christians of Malabar three bishops of their own rite and nationality and erected for them three Vicariates Apostolic, viz., Trichur, Ernakulam and Changanacherry. Finally in 1911 Pope Pius X restored the Vicariate Apostolic of Kottayam *Pro gente Suddistica*, i.e., the descendants of the fourth century emigrant Syrians.

659. The Roman Catholic Archbishop of Madras receives an allowance of Rs. 500 per mensem from the Madras Government for furnishing ecclesiastical returns. The Roman Catholic Church is not dealt with except incidentally in any legal enactments in this country.

ECCLESIASTICAL (1921-22)

660. The Bishop of Madras went on leave on medical certificate to England for six months on the 1st July 1921 and resumed charge of the Diocese on the 6th November 1921. During his absence the acting Archdeacon of Madras administered the Diocese as his Commissary. On the recommendation of the Episcopal Synod which assembled in Calcutta early in 1922 the Bishop of Madras issued a commission to the Bishop of Dornakal to administer the whole Telugu area comprising the districts of Kurnool, Cuddapah and Upper Gōdāvari, where the two Missionary Societies of the Church of England—the S.P.G. and the C.M.S.—are working and thus constituted those districts ecclesiastically part of the Diocese of Dornakal. On the 31st March 1922 there were 284 clerks in Holy Orders officiating under the licences of the Bishop of Madras and the Bishop in Tinnevelly and Madura. Four chaplains were granted leave out of India during the course of the year and the three vacancies caused by the retirement of two senior chaplains and by the resignation of a probationary chaplain were filled up before the end of the year. The appointment of two temporary chaplains sanctioned for the Madras Establishment in 1917 by the Government of India terminated on the 1st January 1922. In consequence of the proposal made by the Bishop of Madras and sanctioned by the Government of India for the reduction of three chaplains on the Madras Ecclesiastical Establishment one probationary chaplain was transferred with the consent of the Government of Madras to the Government of the United Provinces. Two Indians were ordained deacons and four Indians and three Europeans were ordained priests by the Bishop of Madras, while the Bishop in Tinnevelly and Madura ordained nine deacons and six priests, all Indians, and the Bishop of Dornakal ordained on behalf of the Bishop of Madras six Indian and two European deacons and two Indian priests. Twenty-six clergymen were licensed to officiate in the diocese either as chaplains, English ministers, missionaries or Indian pastors ; of these licences nine were issued by the Bishop in Tinnevelly and Madura and six by the Bishop of Dornakal. Alms and other offerings of the people received through clergymen ministering to English congregations during the year amounted to Rs. 1·65 lakhs.

Church of England

Voluntary contributions

661. At the close of the year the establishment of the Church of Scotland consisted of the Presidency Senior Chaplain then in charge at Bangalore, one Senior Chaplain on leave, one Junior Chaplain at Madras, and one Probationary Chaplain in Secunderabad, whose services had been placed at the disposal of the Army Department.

The Church of Scotland

STATIONERY (1921-22)

662. The value of the stock with the Superintendent of Stationery at the beginning of the year 1921-22 was Rs. 8,09,069 (English stores Rs. 3,30,484 and Indian stores Rs. 4,78,585) against Rs. 7,71,367 (English stores Rs. 2,89,756 and Indian stores Rs. 4,81,611) in 1920-21. The total value of stores received during the year amounted to Rs. 17,44,401 (English stores Rs. 7,25,003 and Indian stores Rs. 10,19,398) against Rs. 18,97,318 (English stores Rs. 8,27,484 and Indian stores Rs. 10,69,834) in 1920-21. The decrease of about Rs. 1½ lakhs is due to the fact that no paper was purchased from the Indian mills in 1921-22 as no contract had been entered into with them during that year. This decrease would have been greater but for the receipt of English stores valued at Rs. 4·99 lakhs in 1921-22 against Rs. 1·22 lakhs in 1920-21. The total value of issues during the year amounted to Rs. 18,57,385 (English stores Rs. 5,86,027 and Indian stores Rs. 12,71,358) against Rs. 18,59,616 (English stores Rs. 7,86,756 and Indian stores Rs. 10,72,860) in 1920-21. The value of stationery debited to Local Funds, etc., and of stationery issued on

Receipts

Issues

Local Fund

Closing balance

payment amounted to Rs. 35,587 during the year 1921-22 against Rs. 30,017 in 1920-21. The value of the closing balance of stores for the year was Rs. 6,96,085 (English stores Rs. 4.69,460 and Indian stores Rs. 2,26,625) against Rs. 8,09,069 (English stores Rs. 3,30,484 and Indian stores Rs. 4,78,585) in 1920–21. The decrease under receipts accounts for the decrease under the closing balance, the issues remaining practically the same.

GOVERNMENT PRESS (1921–22)

Finance

663. The total receipts rose from Rs. 1,12,492 to Rs. 1,21,891. The increase was chiefly due to recoveries on account of "chargeable work" and the sale-proceeds of unserviceable plant and stores. The expenditure fell from Rs. 7,21,064 to Rs. 6,43,332. This was due to restricted expenditure on overtime and plant and stores and also to the adjustment on account of indented European stores and plant having been less than the previous year by Rs. 36,182. The increase in cost of labour and material has been more than counterbalanced by economies in printing work, effected mainly in the Secretariat, and by a reduction in the charges on account of overtime.

Publications

664. Acts and books to the value of Rs. 1,12,005 were added to stock and the total sales amounted to Rs. 61,690 against Rs. 68,795 in the previous year, including the sales effected by agents, which amounted to Rs. 6,239 against Rs. 7,732 in 1920–21. The total number of copies of publications supplied free was 393,410 including 79,154 copies of Government Orders.

Printing and binding

665. The outturn during the year in all the four presses (Central, Mount Road, Penitentiary and Ootacamund branches) consisted of 240,371 standard pages of composition against 248,192, and 128,643,460 impressions against 119,936,946 in 1920–21, showing a decrease of 7,821 pages and an increase of 8,706,514 impressions. The decrease in pages was due chiefly to the retrenchment in the printing of Government proceedings and notes, and the increase in impressions was on account of a larger supply of standardized forms. The total number of hours paid for authors' corrections during the year was 44,531 against 39,753 in the previous year. The increase was caused by the printing of special publications involving exceptional work on authors' proofs. The total charges against binding, etc., for the year were less than that for the previous year by Rs. 11,502, chiefly due to economy exercised in controlling the demands for expensive binding and the use of less costly binding materials.

Miscellaneous

666. In the type-foundry 67,172 lb. of types, 13,513 lb. of stereos and electros, 10 punches and 117 matrices were cast. During the year plant to the value of Rs. 1,30,271 was added representing machinery, etc., purchased to replace old and worn out items. The amount deducted for depreciation and unserviceable items removed from use was Rs. 1,00,995 and the year closed with the plant at a book value of Rs. 9,52 898. The stock value of stores in all the presses on 1st April 1922 was Rs. 2,77,035. Receipts amounted to Rs. 6,96,745 and the consumption to Rs. 7,27,980, leaving a balance of Rs. 2,45,800 on 31st March 1922. Printing bills on account of Government work executed at private presses scrutinized and passed during the year amounted to Rs. 61,557 against Rs. 94,486 in the year before. Though the aggregate expenditure shows a reduction of nearly 35 per cent, there was an increase during the year of Rs. 7,291 against the High Court appellate side, due to an increase in scheduled rates, and of Rs. 4,460 against the Director of Public Instruction, representing the cost of printing a large edition of a special booklet on "The Great War" in five vernaculars. The total demand for forms of all kinds during the year, including standardized, non-standardized, Local Board election, Census and Post Office forms, amounted to 185,963,320 against 157,968,097

in the previous year. The demand for standardized forms and covers alone rose from 72,855,615 to 131,534,690. This large increase is due to the fact that the late receipt of indents due in 1920–21 brought two years' demands for certain common forms within the twelve months under report. Forms and covers despatched during the year numbered 180,360,692 against 150,068,892 in 1920–21. Despatch of covers alone amounted to 11,630,199 against the previous year's figure of 6,664,681.

THE CHEMICAL EXAMINER'S DEPARTMENT (1921)

[*G.O. No. 633, Local Self-Government (Public Health) Department, dated the 6th May 1922; Statistics of British India, Vol. VI, Administrative, etc., Medico-legal Investigations*]

667. The amount of work done during 1921 shows an increase as against 1920 in the number of human poisoning cases and general analyses and a small decrease in the number of animal poisoning cases and in the miscellaneous medico-legal cases. The total amount of work, which is best judged by the total number of analyses of all sorts performed (3,952), shows a marked increase both as against last year (3,714) and against the average of the previous sixteen years (3,577). Medico-legal investigations

668. The number of human poisoning cases examined (224) constitutes a record. Poison was detected in 91 cases—a percentage of 40·6 as compared with 41·8 in the previous year. The percentage of detections has in recent years shown a more marked decrease than can be ascribed to errors in sampling. Apparently Medical officers and Magistrates are more ready than they used to be to send viscera for examination when there is even the faintest suspicion of a violent death. The most common poisons detected were mercury, arsenic, opium and aconite. No poison was detected in 132 cases. Human poisoning

669. The number of animal poisoning cases fell from 77 to 56. The percentage of detections was 32·1 as against 48·2 in 1920. Thevetin, the active principle of yellow oleander seeds, was the most commonly found poison, but arsenic ran it a very close second. Four hundred and six cases involving 1,515 articles were investigated for blood or seminal stains or both; these figures are the highest on record. Over one thousand specimens of blood stains were sent to the Imperial Serologist, Calcutta. The number of general analyses rose from 479 in 1920 to 556 in 1921. A larger number of specimens of chloroform than usual were examined on account of a suspicion that some of the chloroform sent out to the Government of India was unsafe for anæsthetic purposes. In no case was it found that the chloroform which the medical stores proposed to issue did not conform to the prescribed tests. Animal poisoning. Stains. General analyses.

670. There were 21 miscellaneous cases involving 211 articles as against 34 cases and 133 articles in 1920. These included bones and counterfeit coins. Miscellaneous

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CHARITABLE INSTITUTIONS (1921-22)

General statistics

671. The number of charitable institutions in the Presidency fell from 3,180 to 3,063, with a corresponding decrease in the aggregate income from Rs. 20·38 lakhs, 320 muras of rice and 67 garces of paddy to Rs. 20·23 lakhs, 20 muras of rice and 6 garces of paddy. Of these 2,017 were maintained entirely by public subscriptions and donations and by endowments of land and money, the total receipts amounting to Rs. 10·11 lakhs. Government supported 326 institutions at a cost of Rs. 2·5 lakhs (as against 315 institutions and Rs. 2·14 lakhs last year) and 155 were maintained partly by Government and partly by the public at a cost of Rs. 3·59 lakhs. The maintenance of the remaining 565 institutions costing Rs. 4·03 lakhs devolved wholly or in part on local bodies. Institutions intended for helping travellers numbered 1,936, and of these 1,165 were reserved for Hindus, the remaining 712 being for the use of the general public. Five hundred and twenty institutions supported almost entirely by the general public were maintained for the relief of Brahmans and 436 for the relief of paupers, while for orphans, lepers, the blind and the deaf there were only 9 institutions. The total number of persons aided during the year at all charitable institutions was 12,420,680.

Triplicane Langarkhana

The receipts of the Triplicane Langarkhana, including an opening balance of Rs. 573-1-7, amounted to Rs. 5,609-1-7 as against Rs. 6,018-4-1 in the previous year. The average daily number of paupers aided during the year was, as in the previous year, 170.

Monegar Choultry

The average daily number of inmates in the Monegar Choultry was 55·67 against 61·30 in the previous year, and the average daily cost of diet per pauper was As. 4-3 against As. 4-11 in the previous year. The total receipts during the year amounted to Rs. 11,663 and the total expenditure to Rs. 10,601 against Rs. 12,045 and Rs. 11,479, respectively, in the previous year. The balance to the credit of the choultry on the 31st March 1922 was Rs. 4,646 against Rs. 3,584 in 1920-21.

The Raja of Venkatagiri's Choultry

The average daily number of out-door paupers in the Raja of Venkatagiri's Choultry was 97·92 against 93·5 in the previous year, and the average daily cost per pauper was As. 1-4 against As. 1-8 in 1920-21. The total receipts during the year amounted to Rs. 4,027, as in the previous year, and the total expenditure was Rs. 2,955 against Rs. 4,064 in 1920-21. The balance to the credit of the choultry on the 31st March 1922 was Rs. 1,382 against Rs. 309 in the previous year.

MUHAMMADANS IN THE SERVICE OF GOVERNMENT (1921-22)

672. The number of Muhammadans in the superior service of Government on the 1st April 1922 was 8,752 as against 8,942 in the previous year. The total number admitted to superior service during the year, excluding those who enlisted as police constables (219), rose from 29 to 57. Thirty-five persons held posts carrying an annual salary of over Rs. 5,000, 56 were in receipt of annual salaries ranging from Rs. 2,501 to Rs. 5,000, 210 from Rs. 1,001 to Rs. 2,500, 332 from Rs. 501 to Rs. 1,000, 2,248 from Rs. 251 to Rs. 500, and 5,871 from Rs. 121 to Rs. 250. The number of Muhammadans employed in the Police department was 6,483, in Courts of Law 534, in the Forest department 488, in the Education department 294, in General Administration 220, in the Registration department 163, in the Land Revenue department 142, and in the Excise department 125; all other departments employed less than a hundred each, except the Political department, where there were no Muhammadans. The percentage of posts in the superior service held by Muhammadans was 13·18, their percentage to the total population of the Presidency (according to the census of 1921) being 6·69.

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